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ABSTRACT

Narrative and statistical data that emerged from a research study of costs and South Dakota Higher Education are presented. The report is concerned with an analysis of the most significant characteristics of costs in South Dakota colleges and universities and related data. Research includes data on seven state controlled colleges and universities and eight privately controlled higher education institutions in South Dakota. The appendices present information regarding--(1) the pattern of income and expenditures for educational and general purposes, (2) cost allocation procedures, (3) budget preparation and processing, (4) projected operating costs for higher education, and (5) costs evaluative instrument. (FS)

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COSTS

AND

SOUTH DAKOTA HIGHER EDUCATION

STATEWIDE COMPREHENSIVE PLAN

OF

HIGHER EDUCATION IN SOUTH DAKOTA

An Inventory of Costs Higher Education Data

Directed by

Alpha Braunesreither and Robert S. Morrissey

SOUTH DAKOTA COMMISSION
ON
HIGHER EDUCATION FACILITIES

State Capitol, Pierre 57501

September, 1969

A report issued by the South Dakota Commission on Higher Education Facilities as the State Agency administering the Higher Education Facilities Comprehensive Planning Grant made through the United States Office of Education under Title I, Higher Education Facilities Act of 1963.

PREFACE

Under Section 3 of Public Law 89-752 of 1966, the United States Congress authorized the expenditure of federal monies for assisting states in developing statewide comprehensive facilities plans for future higher education planning. Consequently, in February, 1967, the South Dakota Commission on Higher Education Facilities (SDCHEF) was designated by the State Planning Agency as the State Agency to administer the Statewide Comprehensive Plan of Higher Education in South Dakota. On April 28, 1967, the Commission adopted and forwarded for approval to the United States Office of Education a draft of the "South Dakota Higher Education Facilities Comprehensive Planning Proposal and Grant Request." On June 5, 1967, the Office of Education approved the draft and provided a financial award to be used in carrying out comprehensive planning activities using a three-phase approach.

Following grant approval by the Office of Education, work was begun immediately upon developing an expanded plan for research completion. Several drafts for an organizational plan were reviewed and approved by South Dakota public and private college and university presidents, the Commission, and other interested groups and individuals. Consequently, in September, 1967, the "Organizational Plan for the Statewide Comprehensive Plan of Higher Education in South Dakota" was printed and given wide distribution. The "Organizational Plan" sets forth in detail the historical background of the research, the scope of the research, general and specific goals, areas and outlines of the research, organizational chart for plan conduction, research time and priorities, and possible use and value of the research. In general, the "Organizational Plan" has served as a blueprint and, therefore, has been carefully followed in the conduct of the study.

The "Organizational Plan" provided for the study to be conducted over a three-year period in three phases:

Phase I - System Development was completed on June 30, 1968. Included in the first-year phase was the development of definitions and standards pertaining to the research areas of faculties, students, curriculum, facilities, and costs. Research committees, composed of faculty representatives from all South Dakota colleges and universities, prepared evaluative instruments in the five research areas. The evaluative instruments were tested in Pilot Projects at Yankton College and South Dakota State University to determine the reliability of the system. The evaluative instruments were then refined and adjusted based upon the results of the pilot projects.

Phase II - Data Gathering was accomplished by the end of fiscal year 1969. Demographic, economic, and social data, as well as the research areas of Phase I, were collected, audited, and programmed where possible for data processing.

Phase III - Data Analysis will be completed by the end of fiscal year 1970. An analysis of data has been performed revealing the current status of South Dakota higher education facilities, faculties, students, costs, and curriculum. Projections, where applicable, will be attempted in each area for short range and long range periods. In addition, data from research areas will be published into five volumes, each emphasizing the important research data affecting South Dakota higher education. Following publication of the five research areas, an on-going development of statewide comprehensive facilities planning will be attempted.

The Statewide Comprehensive Plan of Higher Education in South Dakota was conducted by the South Dakota Commission on Higher Education Facilities with the assistance of its staff and the following individuals, groups, and organizations:

State Advisory Committee in Higher Education Comprehensive Planning. The State Advisory Committee was a fifteen member group broadly representative of the people in South Dakota. The committee was composed of three private and three public higher education institution representatives, five represenatives of the South Dakota Legislature, three represenatives of business and industry, and one representative of vocational-technical institutions. The committee met periodically to offer advice and evaluate the needs of the state as a whole.

SDCHEF Research Staff. The SDCHEF Research Staff was primarily a communication

organ composed of five representatives with one representative chosen by the members of each of the five research committees. The major purpose of the SDCHEF Research Staff was to coordinate committee research to avoid duplicity and foster correlation of collected data.

Research Committees: Costs, Faculties, Curriculum, Students, and Facilities. The Research Committees were composed of five representatives in each group chosen by the Commission from a roster of names submitted by the presidents of all South Dakota colleges and universities. The Research Committees were responsible for identifying available resources of data, developing and gathering new resources of data collecting, developing questionnaires and report forms, and drafting preliminary research findings.

General Consultants. Educational consultants of national reputation and broad experience in the areas of costs, faculties, curriculum, students, and facilities were selected to serve as general consultants for the plan.

Special Consultants. Special Consultants were employed for research of a highly technical nature or to provide counsel and advice regarding analysis of data.

Advisory Facilities Inventory Board. An Advisory Facilities Inventory Board was created to evaluate the condition of all higher education physical facilities in the state. The board was composed of personnel familiar with state and local building codes, fire and other safety regulations, and who could perform an unbiased engineering evaluation of the buildings.

Governing Groups and Other Organizations. The Governor, the State Legislature, governing boards and presidents of colleges and universities, state agencies and councils, the United States Office of Education, educational organizations, and other groups and individuals interested in South Dakota higher education were used as a sounding board, particularly as to the goals for higher education in South Dakota.

Basic to successful completion of the Statewide Comprehensive Plan of Higher Education in South Dakota has been the participation of all public and private colleges and universities in South Dakota. The seven public higher education institutions under the legal control of the South Dakota State Board of Regents and the eight private higher education institutions each under legal control of individual boards and trustees have cooperated fully in conducting the research. This joint cooperation hopefully will provide as complete a picture as possible of public and private South Dakota higher education.

The South Dakota Commission on Higher Education Facilities sincerely acknowledges the assistance and cooperation given by the governing boards, presidents, faculties, and administrative staffs of all higher education institutions in the state. Special recognition is given to members of the State Advisory Committee, Advisory Facilities Inventory Board, SDCHEF Research Staff and Research Committees. In addition, governmental and business contributions of the South Dakota Planning Agency; South Dakota Legislative Research Council; South Dakota Department of Public Instruction; United States Office of Education; American College Testing Program, Iowa City, Iowa; Spitznagel Partners, Inc., Sioux Falls; Computer Services, Inc., Sioux Falls; Business Research Bureau, University of South Dakota; and other groups and agencies are recognized. Also, particular recognition is extended to the five general consultants of national reputation and other special consultants who provided general and specific advice on research progress and individual research areas.

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Augustana College
Sioux Falls

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COST ALLOCATION SYSTEM

Summary

The end result of the Cost Allocation process should provide governing agencies and public and private colleges and universities with information in the following areas:

1) Student Costs – faculty, library, academic administration, general expenses, student expenses, general administration, capital and maintainance per student; are presented. This information provides a basis for forecasting costs in relation to population variances.

2) Faculty – the ratios between students and faculty can be analyzed in detail by program. This should provide some of the answers on program implementation, discontinuance or consolidation and funding.

3) Curriculum – the cost of offering courses should be readily available, thus contributing to management the basic information relative to making decisions in this area. These costs will be available by function and object of expenditure.

4) Space – administrators will have, the total cost of operating additional space and how it effects student costs. The results will also measure the effectiveness of utilization in terms of dollars invested.

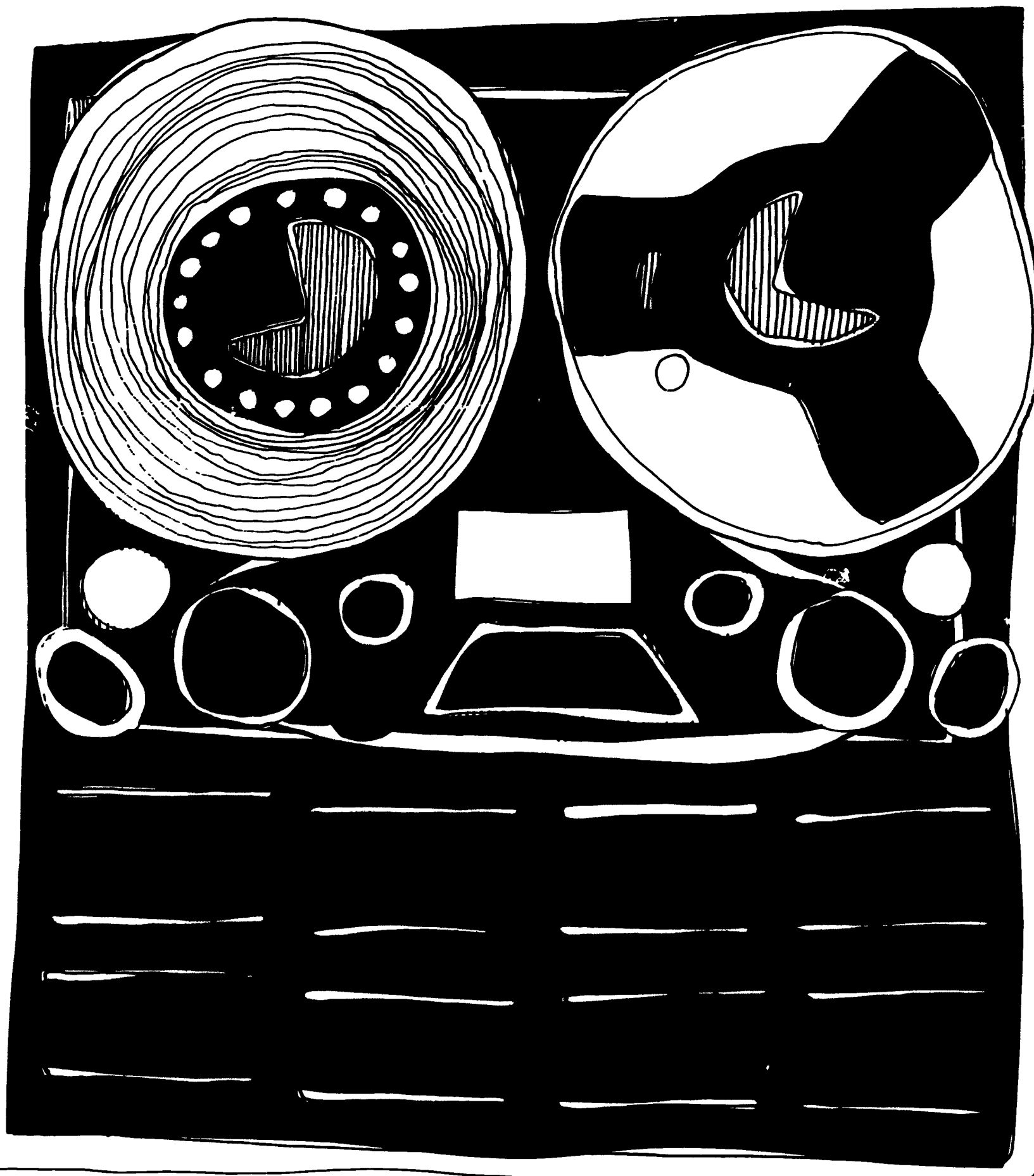
5) Finance-Budgeting – accurate historical data plus a sound future plan generally result in good fiscal management. The uniform cost accounting system should provide very accurate and detail historical financial information to be applied with future forecasts and programs into a sound budgeting process.

6) Efficiency – the above managerial information should enable administrators to more effectively analyze their operations and direct action based on total financial facts with the inherent result of efficiency.

The effectiveness of the total information system depends largely on the utilization of its results on a cooperative basis for the general good of higher education and the public of South Dakota.

Four cost centers result from the nine step allocation process (Flow Chart 14) namely, courses, students, organized research, and extension and public services. These centers retain their identity because of their individual uniqueness to the educational process.

INTRODUCTION



INTRODUCTION

GENERAL COMMENTS:

South Dakota is not unique in its concern for problems in higher education. Throughout the country, from the largest to the smallest state, legislatures, educational groups, and laymen are expressing interest in finding better solutions to the myriad of dilemmas that currently engross institutions of higher education.

Although our problems in higher education are similar to those found in other states, there is a major distinction: The higher education problems in South Dakota are our problems which, if solutions are to be found encompassing the best interests of the state, we must utilize available South Dakota resources to solve them.

Recognizing that the first step toward solving any problem is planning, the state legislature, governing boards, educators, and the public alike are cognizant of the need for a systematic appraisal to obtain data essential to long-range planning. The importance of sound, state-wide planning to meet the needs of South Dakota is acknowledged by the Forty-first Session of the South Dakota Legislature in the following words:

> . . . . .There is hereby acknowledged in the Office of the Governor, the State Planning Agency for the purpose of effectuating, directing and correlating the state and local planning activities in furtherance of the purposes of this Act. . .'State Comprehensive Development Plan' means the plan or plans for the orderly and coordinated growth and development of the State. Such plan shall be based upon physical, social, cultural, economic, governmental and other data relating to state development, and shall include plans for natural resources, land use, and other related activities.

Specifically, as pertains to higher education in South Dakota and the law relating to the South Dakota Commission on Higher Education Facilities the Forty-first Session of the South Dakota Legislature further stated:

> . . . . .The Governor is hereby authorized to designate said Commission as the state agency within the state of South Dakota to prepare and submit state plans for public and private higher education institutions in South Dakota to the proper federal agencies for the purpose of participating under the federal Higher Education Facilities Act and any amendments thereto, and any other related federal acts . . . .The Commission is hereby empowered to carry out the duties imposed in this act . . . .Whereas, this Act is necessary for the immediate support and preservation of the state government and its existing institutions, an emergency is hereby declared to exist and this Act shall be in full force and effect from and after its passage and approval.

The Statewide Comprehensive Plan of Higher Education in South Dakota has encompassed the seven state institutions of higher education and the eight private colleges and universities. Recognizing the importance of assisting all colleges and universities, both public and private, the United States Congress stated in its Declaration of Policy for the Higher Education Facilities Act of 1963:

> The Congress hereby finds that the security and welfare of the United States require that this and future generations of American youth be assured ample opportunity for the fullest development of their intellectual capacities, and that this opportunity will be jeopardized unless the Nation's colleges and universities are encouraged and assisted in their efforts to accommodate rapidly growing numbers of youth who aspire to a higher education. The Congress further finds and declares that these needs are so great and these steps so urgent that it is encumbent upon the Nation to take positive and immediate action to meet these needs through assistance to institutions of higher education, including graduate and under-graduate institutions, junior and community colleges, and technical institutes, in providing certain academic facilities.

The South Dakota Commission on Higher Education Facilities, as prescribed by both federal and state law, assists all institutions of higher education in South Dakota. It is the belief of the

Commission that this assistance and responsiveness to all institutions is the only proper course which can be followed in the development of a comprehensive plan for South Dakota higher education. For institutions of higher education in our state have one common basic goal: *To provide the best possible education for students in South Dakota.*

It is gratifying to the South Dakota Commission on Higher Education Facilities that all fifteen public and private institutions of higher education in South Dakota consented to participate in the development of the statewide comprehensive plan. Such complete interest in the research is particularly noteworthy since research conduction was carried out with the on-going program of each college and university. Recognizing the current burden of the institutions, the Commission has made every effort to gather data and use institutional personnel in such a manner as to minimize the amount of time and work required of individual faculty and staff members.

SCOPE OF THE REPORT:

This report presents narrative and statistical data that emerged from the research study of Costs and South Dakota Higher Education. It is concerned with an analysis of the most significant characteristics of Costs in South Dakota colleges and universities and related data.

This research includes data on the seven state controlled colleges and universities and the eight privately controlled higher education institutions. A listing of the participating institutions, geographical location, and institutional abbreviations commonly used follows:

Augustana College	AC	Sioux Falls, South Dakota
Black Hills State College	BHSC	Spearfish, South Dakota
Dakota Wesleyan University	DWU	Mitchell, South Dakota
Freeman Junior College	FJC	Freeman, South Dakota
General Beadle State College	GBSC	Madison, South Dakota
Huron College	HC	Huron, South Dakota
Mount Marty College	MMC	Yankton, South Dakota
Northern State College	NSC	Aberdeen, South Dakota
Presentation College	PC	Aberdeen, South Dakota
Sioux Falls College	SFC	Sioux Falls, South Dakota
Southern State College	SSC	Springfield, South Dakota
South Dakota School of Mines and Technology	SDSM&T	Rapid City, South Dakota
South Dakota State University	SDSU	Brookings, South Dakota
University of South Dakota	USD	Vermillion, South Dakota
Yankton College	YC	Yankton, South Dakota

PROCEDURES:

The general procedures which were followed in conducting the Statewide Comprehensive Plan of Higher Education in South Dakota are reported in detail in the Commission publication "Organizational Plan." Data basic to this particular research study were gathered, compiled, and analyzed in the following manner:

Activities for the Statewide Comprehensive Plan officially began with an orientation workshop conducted at Sioux Falls College on October 27 and 28, 1967. The meeting was conducted for the purpose of explaining the organizational plan and initiating Phase One – System Development. Those in attendance included public and private college presidents, research committee members, Commission members, representatives of the Legislative Research Council, South Dakota Department of Public Instruction, General Consultants for the research committees, members of the State Advisory Committee, and other interested groups and individuals. Including the initial Sioux Falls meeting to organize the composition of the plan, the following meetings have been conducted:

Costs Research Committee:

October 27 and 28, 1967 ..... Sioux Falls, South Dakota
November 9, 1967 ..... Madison, South Dakota
January 12, 1968 ..... Madison, South Dakota
February 23, 1968 ..... Pierre, South Dakota
April 20, 1968 ..... Sioux Falls, South Dakota
September 19 and 20, 1968 ..... Spearfish, South Dakota
April 28, 1969 ..... Pierre, South Dakota

Faculties Research Committee:

October 27 and 28, 1967 ..... Sioux Falls, South Dakota
January 12, 1968 ..... Madison, South Dakota
February 23, 1968 ..... Pierre, South Dakota
April 20, 1968 ..... Sioux Falls, South Dakota
September 19 and 20, 1968 ..... Spearfish, South Dakota
April 21 and 22, 1969 ..... Pierre, South Dakota

Facilities Research Committee:

October 27 and 28, 1967 ..... Sioux Falls, South Dakota
December 18, 1967 ..... Brookings, South Dakota
January 12, 1968 ..... Madison, South Dakota
February 23, 1968 ..... Pierre, South Dakota
April 19 and 20, 1968 ..... Sioux Falls, South Dakota
September 19 and 20, 1968 ..... Spearfish, South Dakota
May 2, 1969 ..... Pierre, South Dakota

Curriculum Research Committee

October 27 and 28, 1967 ..... Sioux Falls, South Dakota
November 17, 1967 ..... Pierre, South Dakota
January 12, 1968 ..... Madison, South Dakota
February 23, 1968 ..... Pierre, South Dakota
April 20, 1968 ..... Sioux Falls, South Dakota
September 19 and 20, 1968 ..... Spearfish, South Dakota
April 29, 1969 ..... Pierre, South Dakota

Students Research Committee:

October 27 and 28, 1967 ..... Sioux Falls, South Dakota
December 1, 1967 ..... Rapid City, South Dakota
January 12, 1968 ..... Madison, South Dakota
February 23, 1968 ..... Pierre, South Dakota
March 27, 1968 ..... Pierre, South Dakota
April 2, 1968 ..... Pierre, South Dakota
April 20, 1968 ..... Sioux Falls, South Dakota
September 19 and 20, 1968 ..... Spearfish, South Dakota
April 22 and 23, 1969 ..... Pierre, South Dakota

SDCHEF Research Staff:

October 28, 1967 ..... Sioux Falls, South Dakota

November 21, 1967 ..... Pierre, South Dakota
January 12, 1968 ..... Madison, South Dakota
February 23, 1968 ..... Pierre, South Dakota
April 19 and 20, 1968 ..... Sioux Falls, South Dakota
May 8, 1968 ..... Yankton, South Dakota
May 9, 1968 ..... Brookings, South Dakota
June 5, 1968 ..... Yankton, South Dakota
June 6, 1968 ..... Brookings, South Dakota
September 19 and 20, 1968 ..... Spearfish, South Dakota
September 27, 1968 ..... Pierre, South Dakota
November 16, 1968 ..... Spearfish, South Dakota
March 6, 7 and 17, 1969 ..... Pierre, South Dakota
(Individual meetings with Research Committee Chairman)

General Consultants:

October 27 and 28, 1967 ..... Sioux Falls, South Dakota
(Curriculum Consultant, only
November 17, 1967) ..... Pierre, South Dakota
(Facilities Consultant, only
April 19, 1968) ..... Sioux Falls, South Dakota
April 20, 1968 ..... Sioux Falls, South Dakota
May 6 and 7, 1968 ..... Pierre, South Dakota
September 27, 1968 ..... Pierre, South Dakota
(Facilities Consultant only
February 7, 1969 ..... Washington, D. C.
May 13, 1969 ..... Washington, D. C.
May 19 and 20, 1969 ..... Albany, New York
June 2, 1969) ..... Pierre, South Dakota
(Curriculum Consultant, only
April 9, 1969 ..... Denton, Texas
April 24 and 25, 1969 ..... Denton, Texas
May 13, 1969) ..... Washington, D. C.
(Faculties Consultant, only
April 8, 1969 ..... Norman, Oklahoma
April 24 and 25, 1969) ..... Norman, Oklahoma
(Students Consultant, only
April 10, 1969 ..... Denver, Colorado
April 24 and 25, 1969) ..... Boulder, Colorado
(Cost Consultant, only
May 14, 1969 ..... Washington, D. C.
May 19 and 20, 1969) ..... Washington, D. C.

Special Consultants:

June 13, 1968 ..... Pierre, South Dakota
April 2, 1969 ..... Sioux Falls, South Dakota
May 7, 1969 ..... Vermillion, South Dakota
May 8, 1969 ..... Brookings, South Dakota

State Advisory Committee:

October 27, 1967 ..... Sioux Falls, South Dakota

April 20, 1968.....Sioux Falls, South Dakota
September 19 and 20, 1968 .....Spearfish, South Dakota

Advisory Facilities Inventory Board:

March 22, 1968.....Pierre, South Dakota
April, May, and June, 1968.....Facilities Review at all South Dakota Colleges and Universities

Data Gathering Meetings with Institution Data Gathering Coordinators:

November 1, 1968.....Spearfish, South Dakota
November 1, 1968.....Rapid City, South Dakota
November 4, 1968.....Aberdeen, South Dakota
November 5, 1968.....Brookings, South Dakota
November 5, 1968.....Madison, South Dakota
November 6, 1968.....Sioux Falls, South Dakota
November 6, 1968.....Vermillion, South Dakota
November 7, 1968.....Yankton, South Dakota
November 7, 1968.....Springfield, South Dakota
November 8, 1968.....Freeman, South Dakota
November 8, 1968.....Mitchell, South Dakota
November 8, 1968.....Huron, South Dakota

The foregoing meetings are not all inclusive of the work involved in developing this publication. Written and telephone communications have been voluminous. Individual and small informal meetings and conversations have been numerous.

Phase One, System Development may have been the most difficult part of the research. Beyond the major task of forming the committees and advisory groups, there was the difficulty of cohesion of purpose while maintaining research area identity. This problem was resolved through the efforts of the five research committee chairmen coordinating activities on the SDCHEF Research Staff. Phase One also encompassed the development of the evaluative instruments, the questionnaires with which much heretofore uncollected data was gathered. The eventual success in devising adequate evaluative instruments was directly related to two major facts: (1) A personal visitation was made by the research staff to every South Dakota college and university campus in July, 1967, to visit personally with presidents and staffs in order to get advice on what questions should be asked and what answers were necessary for assisting the various governing boards at arriving at meaningful decisions, and (2) pilot projects were conducted at one public and one private South Dakota higher education institution during June, 1968, to test the reliability and validity of the evaluative instruments. Thus, in asking for the "right" information and testing uniform definitions, terminology, general format, and organization, the instruments were further refined.

Phase Two - Data Gathering was begun with major meetings of all research committees and general consultants in September, 1968, called for the purpose of finalizing the evaluative instruments prior to data gathering at the institutions. In November, 1968, the Comprehensive Planning Coordinator again visited all public and private South Dakota colleges and universities for the purpose of personally explaining the evaluative instruments to presidents, institution data gathering coordinators, key administrators, and faculty representatives. Beyond increased efficiency in gathering data, the success of these personal meetings is evidenced by the fact that all institutions returned the complete package of evaluative instruments before the established deadline.

The new year, 1969, was ushered in with a mountain of completed data returned by the institutions. Upon receipt, the research staff began

the major task of reviewing data to check conformity with definitions and instructions; follow up, where necessary to obtain missing data or correct errors with institution data gathering coordinators; compilation of raw data into raw tables and figures for research committee review; and transformation of raw data into professional summaries, tables and figures.

After the data had been assimilated into meaningful form, work was begun on the drafting of a narrative analysis by the research committees and general consultants.

Prior to the writing of the narrative analysis, the Comprehensive Planning Coordinator met with the research committees and the general consultants to discuss the manner in which research data would be presented. It was decided that each publication should contain a summary page of the most significant research information followed by separate narrative analysis by the research committees and general consultants. It was the opinion of the committees and consultants that this method of presentation would allow independently made comparisons of the research data through the views of South Dakotans involved in higher education in the state and non-South Dakotans with a national perspective of higher education. Thus, the total narrative analysis, taken together, may contain areas of agreement, disagreement and interpretation by committees and consultants on the meaning of research data. Obviously, where there is significant disagreement on the interpretation of research data, further study should be conducted to determine the nature of the problem.

During May and June, 1969, the research staff, committees, and general consultants drafted the narrative that was to supplement the tabular and graphic data for the reports.

Prior to final publication, the State Advisory Committee, institutional presidents and staffs, and the Commission reviewed the research data and narrative. Following this review and the incorporation of suggestions for improvement of the publications, the months of July, August, and September were devoted to publication details.

LIMITATIONS:

This report on Costs and South Dakota Higher Education does not include all of the items as originally set forth in Area VII of the "Organizational Plan." In certain instances it became obvious during the research that some items were not necessary or could not be adequately obtained at this time. However, most of the items originally intended for the research have been included.

This report does not include narrative or an explanation of all data presented. In certain cases, the data speaks for itself. In other instances, since it was not the role of the committees or consultants to make recommendations, little could be said without infringing upon the legal prerogative of the governing bodies to interpret data in the light of their responsibilities. Certain data presented could not be commented upon until a greater period of time had passed. In other words, what may appear to be a fact at this time can only be proven with further research or follow up in the future.

Occasionally, there may be missing data on certain items presented. Every attempt was made to get complete information on every item from all institutions. However, there were instances where historical or current information was not available. Missing data in this report has been clearly indicated. Fortunately, such missing data is minimal and, therefore, has not had an appreciable effect on data analysis.

Little emphasis has been placed on presenting comparisons of data on South Dakota institutions and national statistics. Such comparisons have been minimized due to the difficulty of correlating definitions and terms with conflicting and nebulous national terminology. The committees have been satisfied with the fact that it has been possible to standardize most educational areas within the state of South Dakota. Such standardization of terms and definitions have been patterned, where possible, with similar work of the United States Office of Education. Unfortunately, however, until all national education organizations similarly adjust to Office of Education classifications and definitions, there will continue to exist ambiguous and multiple standards of data comparison.

Perhaps the greatest limitation of this study has

been time, money and personnel. Certainly, this could be said of any research project. But, even though three years were allocated for the research, a federal grant was obtained to finance the study, and excellent faculty members and general consultants participated in the research, the mass of important data collected clearly indicates how much more could be learned about higher education in South Dakota if greater resources were available.

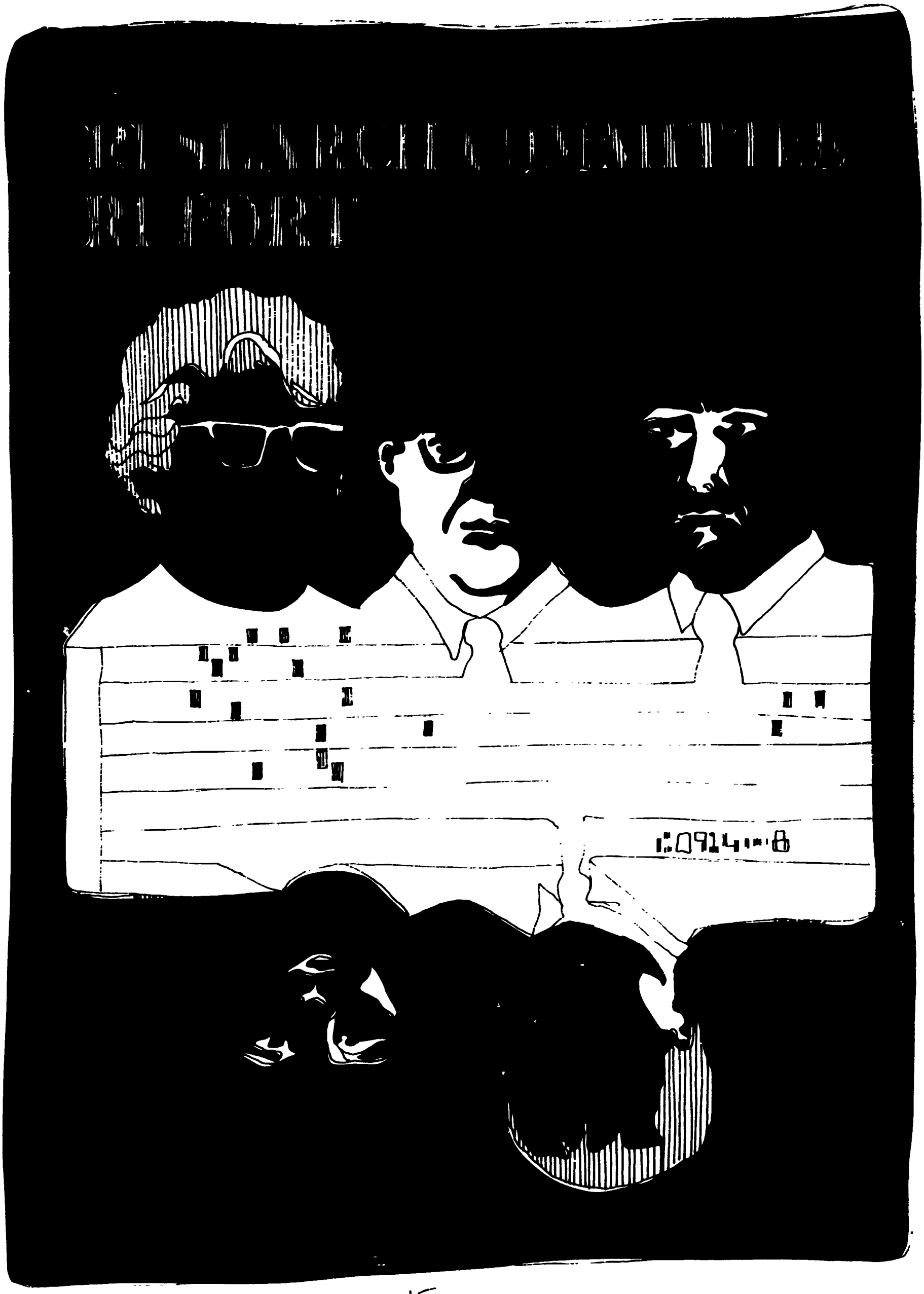
SOURCE OF DATA:

The great majority of the information presented in this report was obtained from the following sources: (1) Reports in the files of the South Dakota Commission on Higher Education Facilities; (2) Reports in the files of the South Dakota State Board of Regents; (3) Data from state governmental agencies; (4) Data from the evaluative instruments which, in turn, were supplied by the institutions; (5) Data obtained through research in cooperation with the business and educational research corporations; (6) Data presented by the general consultants and special consultants; (7) Data obtained from the United States Office of Education; and (8) Data submitted by individual faculty members at public and private South Dakota colleges and universities.

CONCLUSION:

This project for the development of a Statewide Comprehensive Plan of Higher Education in South Dakota was initiated with great enthusiasm and high expectations. The Higher Education Facilities Commission believe that higher education and the state of South Dakota can derive valuable benefits from the research data presented in this report.

The value of the Statewide Comprehensive Plan of Higher Education in South Dakota, beyond fostering cooperation, providing information, and management instruments for private and public institutions will be determined by what subsequently happens regarding the improvement of South Dakota higher education. The efforts of the Higher Education Facilities Commission in compiling and analyzing quantitative data on factors which affect quality education will be completed by the conclusions drawn and actions taken by the appropriate private and public boards, agencies, legislature, and the colleges and universities themselves. Thus, valuable information obtained from the statewide comprehensive plan can be the vehicle used for designing and implementing programs to meet the major problems and challenges of South Dakota Higher Education. To this end it is the hope of the South Dakota Higher Education Facilities Commission that statewide comprehensive planning will become a continuous on-going process through a cooperative partnership of all public and private colleges in South Dakota.



THE COMPREHENSIVE INFORMATION SYSTEM

GENERAL COMMENTS

The present trend in higher education is *rapid* enrollment and research *expansion*; so rapid is the condition that institutions are handicapped by the lack of resources. When we speak of resources we mean Finance, Space and Personnel. The benefactors of education, students, industry, and the general public, are also plagued with rapidly increasing cost of living indexes, higher taxes and are insisting on the maximum utilization of all resources by the institutions in achieving their goals. As the institutions search and in part receive additional resources, the grantor generally attaches administrative routines, regulations and reporting requirements that soon develop into a massive overhead burden. Therefore, the objectives of this research was:

> To design various systems that will provide a program which should furnish financial information to all levels of administration in such a manner that it is comparable, comprehensive, unbiased and in accordance with generally accepted accounting principles as prescribed by the American Council on Education for Institutions of Higher Education. The design of financial accounting system is based on cost accounting principles and standards with resultant detail information for Planning, Programming, and Budgeting.

The "Comprehensive Information System" is designed:

1) To determine the costs of programs by subject matter, by class level, by the FTE student, by FTE faculty, and by the utilization of space.
2) To systematically inventory, evaluate, plan, and program resources with present conditions and future forecasts.
3) To consolidate the information collection and reporting responsibilities to avoid duplication of effort and to utilize more effectively the time of the administrators.
4) To provide the various levels of administration with vital current operating information to assist in making decisions for efficiency, quantity, and quality.
5) To expand and upgrade the quality and quantity of operational data through the maximum utilization of data processing equipment.

The system demands a great deal of planning prior to implementation especially with the inter-relationship and dependence of all the resources on each other. This plan requires that each institution analyzes its reporting and management information needs in detail which in turn would be incorporated in the system through the Program Classification and Chart of Accounts and Codes.

Every system is developed with the use of common terminology which must be understood by all. The basic terminology in this system is:

1) *Program* – This classification includes the following functions – General Administration, General Expense, Instruction and Departmental Research, Organized Activities Relating to Educational Departments, Organized Research, Extension and Public Services, Library, Physical Plant and Auxiliary Services.
2) *Activity* –This classification includes the divisions within the Program, for example – The instructional and departmental research Program is sub-divided into colleges, divisions, and departments.
3) *Subject-field Classification* – This category has been updated to be coordinated with the U. S. Office of Education and Health, Education and Welfare. The categories are General or Unclassified Fields, Life Sciences, MCPE Sciences, Behavior Sciences, Humanities, Progressions, Technical-Vocational Fields, and Physical Education and Military Science.
4) *Subject Matter Classification* – This category would include courses offered within a college and of a division.
5) *Levels* – This category divides the subject

field of instruction into – Freshman, Sophomore, Junior and Senior, Masters, Doctorate and Professional.

6) *FTE* – This category is a means to arrive at a "Full-time Equivalent Student and/or Faculty Person" by establishing a factor for conversion.

This plan includes the basic methodogy for a cost allocation system. Each area can be expanded to fit each institutional need as required.

The Cost Committee has spent little research effort on historical data but directed its' efforts toward the design of a system to determine what is presently needed and applicable to future demands. This decision was based on the fact that numerous such studies are available and the real problem that exists today is for more scientific managerial procedures. The committees have been devoted to finding ways and means to use all available resources at optimum efficiency levels.

The Cost Committee is aware that there is often opposition to new forms of management. Such opposition appears to be based upon (1) that educational outputs cannot be measured, and that any attempt to do so is ludicrous if not actually subversive of the purposes for which academic institutions exist; (2) that there is an inherent conflict between administrative efficiency on the one hand and academic effectiveness on the other; (3) that efforts to improve management efficiency are really designed to increase the power of administrators at the expense of faculty members.[1] This committee has not attempted to prove or disprove these beliefs but directed its efforts in systemizing financial methods into meaningful reporting media.

SIGNIFICANCE OF EVALUATIVE INSTRUMENT

The evaluative instrument as presented in Appendix F of this publication was prepared by the Cost Research Committee to obtain information with regard to sources of income and expenditures by function. These instruments were revised in several areas so that meaningful and comparative statistics would be obtained.

All colleges and universities in South Dakota responded. Through the use of these questionnaires, those concerned for the financing of higher education in South Dakota can readily compare all South Dakota institutions, (they can compare private versus public,) with those in other areas.

[1] Frances E. Rourke and Glen E. Brooks—The Managerial Revolution in Higher Education. John Hopkins - 1966.

EDUCATIONAL AND GENERAL INCOME
INSTITUTIONS OF HIGHER EDUCATION
SOUTH DAKOTA, 1967-68

Table 1

	Student Fees	Governmental Appropriations Remitted to General Fund	Governmental Appropriations From State Government	Governmental Appropriations From Federal Government
Public Institutions				
University of South Dakota	$ 2,052,275.00	$ 1,991,678.00	$ 5,706,392.00	---
South Dakota State University	2,173,721.99	1,906,799.00	6,342,631.28	$ 216,175.06
Northern State College	1,106,191.00	1,140,238.00	2,435,768.00	---
Southern State College	355,549.22	30,240.47	1,158,331.35	85,911.60
Black Hills State College	856,860.00	---	1,692,505.00	---
General Beadle State College	413,922.00	398,690.00	1,067,559.00	---
S. Dak. School of Mines & Technology	494,124.17	2,059,296.00	2,059,296.00	---
Sub-Total	$ 7,452,643.38	$ 7,526,941.47	$20,462,482.63	$ 302,086.66
Private Institutions				
Augustana College	$ 2,181,387.43	---	$ 4,578.88	$ 272,975.66
Huron College	529,786.00	---	---	---
Sioux Falls College	700,424.00	---	---	---
Mount Marty College	321,514.00	---	---	6,768.00
Dakota Wesleyan University	668,231.00	---	---	13,549.00
Yankton College	776,687.00	---	---	161,613.00
Presentation College	96,801.00	---	---	---
Freeman Junior College	90,048.00	---	---	---
Sub-Total	$ 5,364,878.43	---	$ 4,578.88	$ 454,905.66
Total	$12,817,521.81	$ 7,526,941.47	$20,467,061.51	$ 756,992.32

EDUCATIONAL AND GENERAL INCOME (Continued)

Table 1 Continued

	Endowment Income	Gifts and Grants	Sales and Services of Educational Departments	Organized Activities Relating to Educational Departments
Public Institutions				
University of South Dakota	$ 71,856.00	$ 3,840,347.00	---	---
South Dakota State University	156,496.78	2,693,641.59	$ 56,186.19	---
Northern State College	40,569.00	33,431.00	---	---
Southern State College	30,240.47	---	---	---
Black Hills State College	32,614.00	192,607.00	---	---
General Beadle State College	18,420.00	41,107.00	---	---
S. Dak. School of Mines & Technology	29,228.42	1,12[illegible],500.00	8,010.12	---
Sub-Total	$ 350,196.25	$ 7,925,633.59	$ 64,196.31	---
Private Institutions				
Augustana College	$ 28,603.67	$ 402,184.94	---	$ 88,047.05
Huron College	56,180.00	80,128.00	---	---
Sioux Falls College	11,076.00	138,693.00	---	---
Mount Marty College	---	48,036.00	---	---
Dakota Wesleyan University	61,507.00	110,910.00	---	25,950.00
Yankton College	64,362.00	97,315.00	---	20,847.00
Presentation College	141,783.00	36,318.00	---	---
Freeman Junior College	6,288.00	64,603.00	---	2,603.00
Sub-Total	$ 369,799.67	$ 978,187.94	---	$ 137,447.05
Total	$ 719,995.92	$ 8,903,821.53	$ 64,196.31	$ 137,447.05

EDUCATIONAL AND GENERAL INCOME (Continued)

Table 1 Continued

	Other Sources of Income	Auxiliary Enterprises	Student Aid
Public Institutions			
University of South Dakota	$ 151,037.00	$ 3,726,618.00	$ 355,885.00
South Dakota State University	---	4,362,294.45	671,205.76
Northern State College	3,873.00	958,914.00	131,793.00
Southern State College	74.00	20,622.26	77,518.00
Black Hills State College	---	794,781.00	280,000.00
General Beadle State College	752.00	568,176.00	277,197.00
S. Dak. School of Mines & Technology	---	647,435.00	86,756.00
Sub-Total	$ 155,736.00	$ 11,078,840.71	$ 1,880,354.76
Private Institutions			
Augustana College	$ 76,032.08	$ 1,048,787.95	$ 213,561.98
Huron College	---	134,198.00	---
Sioux Falls College	21,460.00	344,646.00	48,879.00
Mount Marty College	2,909.00	288,909.00	12,176.00
Dakota Wesleyan University	17,566.00	414,898.00	73,253.00
Yankton College	3,996.00	467,802.00	16,572.00
Presentation College	1,764.00	118,381.00	7,900.00
Freeman Junior College	754.00	50,482.00	---
Sub-Total	$ 124,481.08	$ 2,868,103.95	$ 372,341.98
Total	$ 280,217.08	$ 13,946,944.66	$ 1,972,696.74

EDUCATIONAL AND GENERAL EXPENDITURES
INSTITUTIONS OF HIGHER EDUCATION
SOUTH DAKOTA, 1967-68

Table 2

	General Administration and General Expense	Instruction and Departmental Research and Organized Activities Relating to Educational Departments	Organized Research	Extension and Public Service
Public Institutions				
University of South Dakota	$ 1,076,161.00	$ 6,297,626.00	$ 1,460,653.00	$ 360,387.00
South Dakota State University	912,704.02	4,086,684.33	2,532,606.03	749,008.67
Northern State College	415,777.00	1,485,071.00	---	25,265.00
Southern State College	80,152.00	564,762.00	---	25,182.00
Black Hills State College	322,656.00	1,081,378.00	---	22,698.00
General Beadle State College	245,172.00	573,965.00	---	14,845.00
S. Dak. School of Mines & Technology	314,908.00	1,248,411.00	1,482,419.00	87,343.00
Sub-Total	$ 3,367,530.02	$15,337,897.33	$ 5,475,678.03	$ 1,284,728.67
Private Institutions				
Augustana College	$ 710,975.30	$ 1,559,981.85	$ 93,844.45	$ 128,282.78
Huron College	193,618.00	278,626.00	---	79,076.00
Sioux Falls College	190,529.00	487,309.00	4,000.00	---
Mount Marty College	217,683.00	361,561.00	---	125.00
Dakota Wesleyan University	267,899.00	433,892.00	---	---
Yankton College	351,415.00	488,898.00	63,506.00	10,081.00
Presentation College	103,819.00	133,325.00	---	---
Freeman Junior College	29,460.00	85,196.00	---	---
Sub-Total	$ 2,065,398.30	$ 3,828,788.85	$ 161,350.45	$ 217,564.78
Total	$ 5,432,928.32	$19,166,686.18	$ 5,637,028.48	$ 1,502,293.45

EDUCATIONAL AND GENERAL EXPENDITURES (Continued)

Table 2 Continued

	Libraries	Operation and Maintenance of Physical Plant	Student Aid	Auxiliary Enterprises	Transfers to Other Funds and Property Payments
Public Institutions					
University of South Dakota	$ 232,118.00	$ 622,072.00	$ 381,829.00	$ 3,836,375.00	---
South Dakota State University	295,037.81	715,839.57	705,505.42	2,457,621.37	---
Northern State College	120,822.00	401,572.00	129,577.00	791,510.00	---
Southern State College	48,833.00	143,410.00	87,933.00	290,000.00	---
Black Hills State College	74,617.00	175,165.00	280,000.00	622,264.00	---
General Beadle State College	45,393.00	178,716.00	289,908.00	588,224.00	---
S. Dak. School of Mines & Technology	92,225.00	258,829.00	78,703.00	520,551.00	---
Sub-Total	$ 909,045.81	$ 2,495,603.57	$ 1,953,455.42	$ 9,106,545.37	---
Private Institutions					
Augustana College	$ 139,296.19	$ 291,966.36	$ 400,585.36	$ 828,340.56	$ 190,723.24
Huron College	24,185.00	109,136.00	35,031.00	126,044.00	---
Sioux Falls College	48,346.00	93,737.00	94,894.00	247,353.89	---
Mount Marty College	41,377.00	53,198.00	51,597.00	335,902.00	---
Dakota Wesleyan University	46,765.00	57,743.00	141,913.00	426,593.00	---
Yankton College	55,381.00	85,407.00	137,641.00	450,505.00	---
Presentation College	36,223.00	55,331.00	7,900.00	100,437.00	---
Freeman Junior College	4,909.00	17,422.00	4,492.00	46,765.00	---
Sub-Total	$ 396,482.19	$ 763,940.36	$ 874,053.36	$ 2,561,940.45	$ 190,723.24
Total	$ 1,305,528.00	$ 3,259,543.93	$ 2,827,508.78	$ 11,668,485.82	$ 190,723.24

THE COST PILOT PROJECT

From the very beginning, the Cost Research Committee felt that a cost allocation system was necessary for higher education in South Dakota. The increased enrollments necessitate additional programs which require classrooms, staff, and the necessary related services. In order to evaluate the past, sound judgment on such new program costs must be known.

The basic concept of the cost system is to reduce all costs for the higher education institutions to a common frame of reference and as an end result, costs analysis will be available by subject matter, by class level, and by program. Included in such costs analysis will be cost of instruction or instructors, supplies, cost of the space utilized, cost of the equipment used, the library, the student services, and the administration of the college.

When such costs are established, it is possible to forecast such components of future expansion or reductions as dictated by enrollment fluctuations.

A South Dakota college was selected to serve as a pilot project to assure that the cost allocation system would be a workable system. The financial affairs for the fiscal year ended June 30, 1968 were used in the application of the system.

The pilot project college's data processing equipment consisted of an IBM 402 accounting machine and the various supporting equipment such as a key punch, sorter, collator, etc. The college did not have access to a computer.

Considerable multiplication was necessary in order to determine the cost of space, the instructor's time in the classroom and so forth. This could be done more readily with a computer if one were available. The pilot project college was able to allocate cost for the two semesters and the summer session in a matter of about three weeks time utilizing the services of only one employee.

Relatively few procedural changes would be needed in an institution's present accounting procedures in order to carry out cost allocations on a current basis. Several standard costs, either on a unit basis or a percentage basis could be applied in some areas; for example, the library.

Those institutions which do not maintain a central store will need to make some provisions with regard to supplies. It was found in the pilot project college, as much as 80% of the supply needs were purchased during the first semester. This will tend to inflate supply costs for courses offered during this period. This could be corrected either by maintaining perpetual inventory records or by changing the purchasing policies.

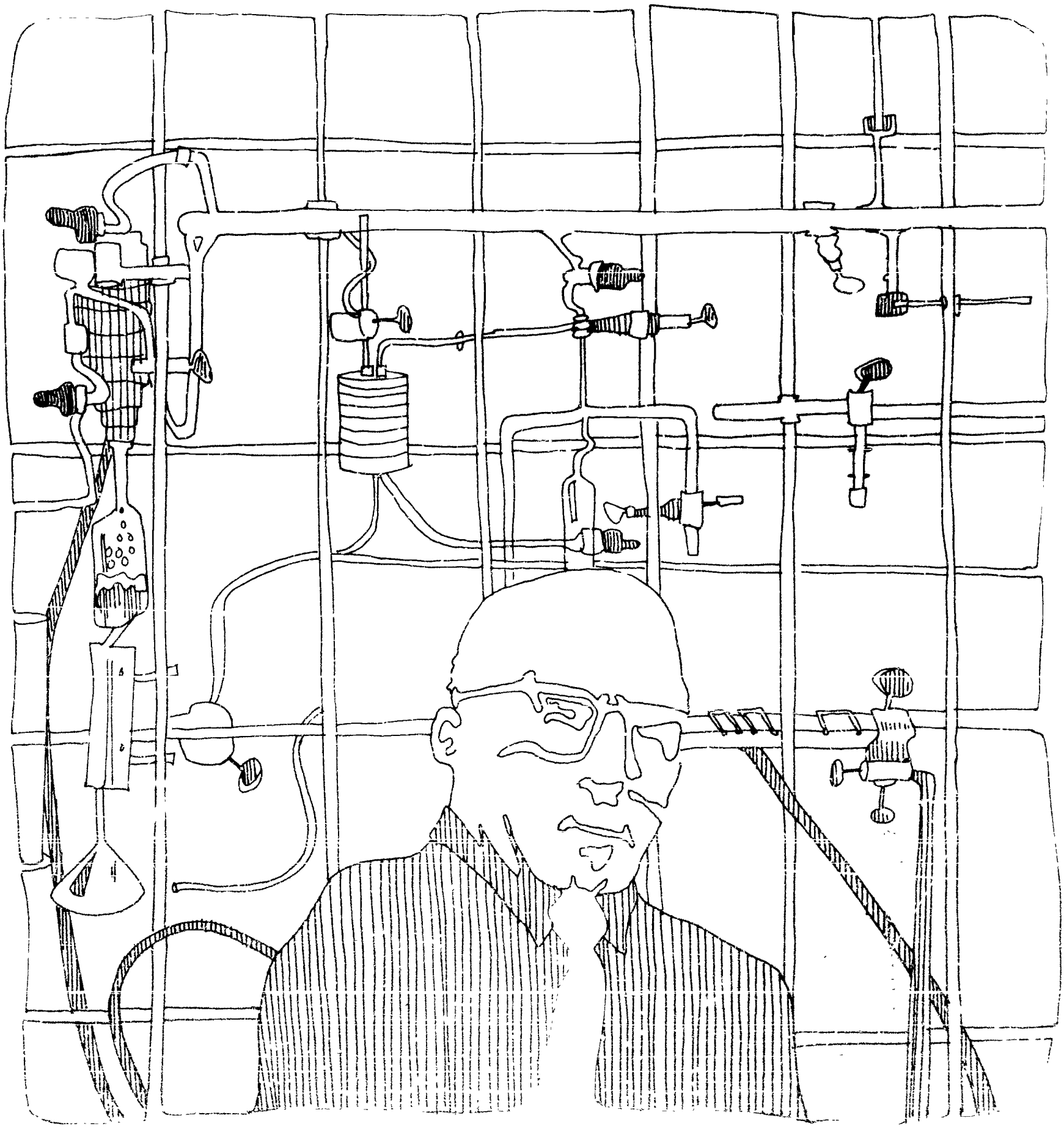
An area that needs further clarification is Physical Education classes. Presently classroom facility costs are determined on the basis of scheduled assignable space. However, many physical education courses are taught out-of-doors. In fact, some are taught in facilities other than those owned by the college.

Usually a portion of time such as registration periods, class assignments and testing are done in a classroom. Care needs to be taken to assure that these activities are accounted for in the appropriate expense category. It is impossible to properly prorate these costs but we wish to apprise those planning to implement this system of this potential problem.

The cost allocation system as proposed in this report makes the "functional approach" a very adaptable budgeting process to South Dakota. The basic program of institutions would be budgeted by using historical cost information applied to the student population by subject matter and professional standards for corresponding facilities and faculty.

With this fiscal knowledge, the administration, the governing boards, and the legislators are in a position to understand and to act with confidence.

GENERAL CONSULTANT REPORT



GENERAL COMMENTS

Dr. J. Lee Westrate
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Washington, D. C.

In establishing the perspective of its evaluative instrument, the Costs Research Committee has correctly identified one of the key issue confronting higher education today—that of finding more scientific managerial procedures. Our highly complex, technical, urbanized society is beset by a series of management problems that permeates virtually its every aspect. Change is occurring rapidly. The needs of our society tax our resources to the point where we must constantly think in terms of priorities, effective allocation of those resources and efficient management.

The argument can convincingly be made that higher education is unique—that overemphasis on administrative tidiness could stultify the learning process, and that intellectual and cultural enrichment cannot be assessed in terms of a cost/benefit ratio. Such arguments only serve to strengthen the case for developing sound managerial procedures, so that the uniqueness of higher education can be protected from misuse of resources and unsound decisions.

The immediacy of the management issues exists because higher education is now big business. It involves sizeable public and private investment which has been increasing at a significant rate and this promises to continue for a forseeable period. Student enrollment is increasing. Rapid development of knowledge results in curriculum modification, new forms of research, demands for new faculty or faculty retraining, and invariably demands arise for new or improved facilities. A dynamic society requires change in its educational institutions to meet new or modified needs. And all this means increased costs! If needed changes cannot be made, the quality of higher education and the quality of the institutions themselves will suffer.

The search for and development of better management tools is an ancient and honorable profession. The principal impetus for the growth of scientific management occurred shortly after the turn of the 20th Century and accelerated as a result of industrial and social change produced by World War II and the full flowering of the scientific and technological revolution. The dramatic rise in Federal research support in universities coupled with the requirement for rapid expansion of education resources has brought the management problem squarely to the front door of academic administration.

During the past decade, there has been widespread acknowledgment in government, business and industry that decisions must occur within some reasonable well structured context or system. Intuitive judgments, while useful, can lead to serious difficulties if based upon suppositions that are more fictional than fact or liberally supported by wishful thinking. The larger and more complex the program to be managed, the more serious the consequences of error. The search for better decision-making tools led to the first experiments with program budgeting and its ultimate expansion into the concept of a Planning, Programming and Budgeting System which is now so widely in use. Drawing upon the logic and discipline of this approach, as validated by experience, the Costs Research Committee has structured its cost allocation system to permit the gathering of those data which are essential to the development of a PPB system for use by the Universities and Colleges of South Dakota.

The Planning, Programming, Budgeting System rests on a few simple concepts—setting of goals, determination of objectives which are consistent with those goals, developing supporting programs to achieve the objectives and finding and allocating the required financial resources. By design, the PPB system functions in an orderly progression, but yet all parts interrelate. The availability of resources will vitally affect the choice of goals and their supporting programs. However, these same goals and essential programs set the demand for resources. Thus, in relating resources to requirements there is a negotiation process which usually gets resolved in a budget. In the management process, the budget has become the major instrument for decision-making and a principal method for developing responsible management. A budget cannot legitimately set requirements and decisions made with respect to them. What is essential to sound planning,

programming and budgeting is good, reliable, pertinent cost data. True costs as well as meaningful costs in terms of managing the enterprise must be known. Without this information, there can be little responsible financial management, the development of intelligent priorities or the proper weighing of alternatives and the making of intelligent choices. It is at the point of identifying and collecting sound cost data, that the Costs Research Committee has properly decided to make its major thrust.

The methodology and disciplined thinking involved in the Planning, Programming, Budgeting System has found considerable acceptance in institutions of higher education throughout the Nation. It is an approach which can be developed to that level of sophistication which is commensurate with the complexity of the institution. For example, it can be used with equal advantage by South Dakota State University and Sioux Falls College, but obviously the PPB system developed at the two schools will vary considerably in complexity. Both have the problem of setting goals for the coming years, particularizing their objectives, making program decisions, considering alternative approaches to achieving these objectives, and layout out a financial plan to get there from here.

The intensive effort expended in developing the Statewide Comprehensive Plan of Higher Education Facilities in South Dakota has served to focus attention on the "real world" in which both the State's public and private institutions must exist as they contemplate future improvements. The State of South Dakota is quite stable in terms of population growth as well as demographically. This is highly significant to State supported schools, because the resource base is not materially expanding either. For private institutions, this may be of less importance because, in the aggregate, half their students come from outside South Dakota and their resource base is more limited by their competitive position in the market area they serve and their capacity to attract support from non-governmental patrons. Some growth in student body can be anticipated if the percentage of young people seeking a college or university education continues to increase, and this constitutes a force for growth. The other principal impetus to change is the dynamic forces now modifying the patterns of higher education. The adjustments required are expensive, so we are right back at the resource base and the importance which must be attached to costs.

Higher education, of course, provides only one source of the demands of a complex society for public and private funds. For publicly supported schools, this means the demand is principally lodged against the South Dakota treasury, which in common with most states is hard pressed for sufficient revenues. Increasing costs caused both by inflation and the generally greater expense of the tools for research and teaching quickly force attention on the resource base and the need to make effective use of limited funds. The rapid increase in Federal support for higher education demonstrates in inability of state, local and private sources to meet current demands. For the university and college in South Dakota, as elsewhere, the financial problem can be seen most vividly as the need to be economically viable is balanced against the requirement to be intellectually and educationally viable.

Because costs loom so significantly in deciding future improvements in higher education essential data, including fiscal data, are required in a variety of areas, e.g., students, curriculum, faculty, facilities, and changes in educational fields which affect all of these. The quality of these data must be sufficient to reveal trends and patterns and permit some credible educational forecasting. These data must likewise be sufficiently reliable to assist college and university administrators in developing criteria for change and growth within their institutions.

With respect to cost data specifically only that which will give a clean financial picture of the institution and indicate trends and patterns should be collected. Excessive detail is not needed. On the income side, the principal sources should be tallied, e.g., state, local and Federal funds, tuition and fees, user charges for auxiliary enterprises, endowment, private gifts and grants and any other significant sources. Similarly for expenditures, accurate data are required for such areas as departmental instruction and research, specialized or separable research units, general facilities such as libraries, general administration, and auxiliary services. Effective utilization of this information is

the key to sound financial management. By knowing true costs and the pattern of income, any problem involved in proposed modification of programs or expansion of facilities can be accurately costed out or costs reasonably predicted with the weighing of alternative approaches. This is the real payoff—no modification or expansion need be undertaken in the absence of a full understanding of its financial consequences and potential demand on the resource base. Appropriate financial strategies can be developed as a result of such analysis.

ANALYSIS OF COST ALLOCATION SYSTEM

The cost allocation system which the Costs Research Committee has devised provides a sound basis for assembling the vital data each college and university in South Dakota should have. The categories of income and expenditures selected appear to be those most susceptible to management. If accurate data are collected in these categories it should be possible to cost out each significant program or activity. Further, the categories are equally valid for public or private institutions. The flow charts found in the evaluative instrument should prove of considerable use in reminding administrators of the interrelationships among various parts of the system and the allocation of expenditures among them. The discussion on budgeting processes is instructive and offers one useful budgetary advice without being prescriptive.

Use of this cost allocation system by the colleges and universities of South Dakota will determine what, if any, changes should be made to it. The system should be continually evaluated to determine if it is generating pertinent data, whether or not the categories need modification, and whether it is achieving its potential as a tool of effective management.


SUPERSTARS

Appendix A: Pattern of Income and Expenditures for Educational and General Purposes

Pattern of Income and Expenditures for Educational and General Purposes

Income Trends by Sources

Tuition and Fees:

Consideration should be given to higher educational costs with continual review of the students' contribution. The state should study its position on not leaving the institution's income as a direct means of support. The current procedure eliminates all flexibility in being able to adjust to enrollment variables, departmental income that usually are derived from additional cost outlays. The private schools are in a position where this type of income is their major revenue source and are estimated to provide 70 to 90% of the operating budget resources (not including Plant Capital Outlay).

State Appropriations:

Income by source for educational purposes as derived from state government is as follows:

Appropriations

Direct General Appropriation for salaries, Operation & Maintenance, etc. usually line items.

Special or Restricted Appropriations

For a particular program, usually used for construction, land acquisition, etc.

A second type of appropriation is somewhat indirect in that the monies are allocated to the Board of Regents for later allocation to the educational institutions. An example of these might be Building Repairs, Deferred Maintenance and Contingencies.

Further sources of income available for general education are the proceeds either through the sale of property or interest on investments of the School and Public Lands.

There are service in kind, so to speak, that are available to educational institutions such as, the services of the State Engineer, State Fire Marshall, Attorney General, State Purchasing & Printing, etc. These departments provide services for the educational institutions at either no cost or a very nominal cost.

Under other sources of income, although of inconsequential amounts, we might include sales of supplies and services as rendered by the institution. Proceeds of such sales or services are placed in the General Fund, but not necessarily allocated to the institutions.

Private Gifts and Grants:

All institutions of higher education depend upon gifts for:

1. Growth; Expansion of Physical Plant; Endowment Fund
2. Development; Research and Enrichment of Program
3. Scholarships; Permanent Funds, restricted and unrestricted
4. Basic Operating Budget; Direct Gifts;

Private sources of potential income include:

1. Alumni
2. Foundations
3. Non-alumni individuals and families
4. Business Corporations
5. Religious Denominations
6. Non-alumni, Non-church groups
7. Other Sources; Organizations; Institutions

Types of Support Include:

1. Cash
2. Securities, stocks, bonds
3. Real Estate
4. Annuities
5. Life Income Contracts
6. Return of Principal Contracts
7. Life Insurance Plans
8. Bequests
9. Trust Agreements

Means of Securing Support include:

1. Alumni. Maintain accurate list of all persons having attended one or more years. Mail and direct contacts. Associations and regional clubs. Annual and/or periodic drives. Special projects, i.e. Endowment, Scholarship, Insurance Plans.
2. Foundations. Demonstrate results of product. Distinguished alumni. Use nationwide directory. Continue cultivation of contacts. Discover areas of interest.

3. Business Corporations, Concerns, their Foundations; Personal contacts, Corporate Matching Program–Employee Contributions. Special projects, i.e., Faculty Salary improvement; Research projects.
4. Religious Denominations. Support is given public and private institutions. Cultivation; Direct contacts; Apportionments; Membership Assessments.

TUITION, FEES, ROOM, BOARD, AND OTHER CHARGES
INSTITUTIONS OF HIGHER EDUCATION
SOUTH DAKOTA, 1967-68

Table 3

	Tuition	Application Fee	Out-of State Tuition	Student Union Fee	Health
Public Institutions					
University of South Dakota	$ 304.00	$ 10.00[1]	$ 800.00	$ 24.00	$ 20.00[2]
South Dakota State University	304.00	10.00[1]	800.00	30.00	14.00
Northern State College	304.00	10.00[1]	640.00	19.00	6.50[2]
Southern State College	304.00	10.00[1]	640.00	4.00	4.00
Black Hills State College	304.00	10.00[1]	640.00	7.50	8.00
General Beadle State College	304.00	10.00[1]	640.00	20.00	6.00
S. Dak. School of Mines & Technology	342.00[3]	10.00[1]	800.00	25.00	25.00
Average	$ 304.00	$ 10.00	$ 722.85	$ 18.50	$ 11.95
	($9.50 per credit hour)				
Private Institutions					
Augustana College	$ 1,150.00[4]	$ 175.00[4]	---	$ 25.00	---
Huron College	750.00	50.00	---	6.00	---
Sioux Falls College	750.00	64.50	---	32.00	---
Mount Marty College	550.00	100.00	---	---	$ 25.00
Dakota Wesleyan University	775.00	69.00	---	20.00	---
Yankton College	1,090.00	120.00	---	20.00	---
Presentation College	500.00	100.00	---	---	---
Freeman Junior College	400.00	5.00[1]	---	7.50	---
Average	$ 745.65	$ 85.45	---	$ 13.80	---

[1]Charged only once.

[2]Charge included under Activity Fee.

[3]Eighteen credit hours required.

[4]Figures used are a "No Guarantee" Charge; since Augustana Colleges operates on a guarantee basis, some charges vary: e.g. Tuition $1,150-$900, General Enrollment Fee $175-$69.

TUITION, FEES, ROOM BOARD, AND OTHER CHARGES (Continued)

Table 3 Continued

	Alumni	Activity Fee	Matriculation	Late Enrollment
Public Institutions				
University of South Dakota	---	$ 44.00	$ 5.00[1]	$ 10.00
South Dakota State University	$ 2.00	33.40	5.00[1]	10.00
Northern State College	---	29.00	5.00[1]	10.00
Southern State College	.75	17.75	5.00[1]	10.00
Black Hills State College	1.50	27.00	5.00[1]	10.00
General Beadle State College	.75	17.00	5.00[1]	10.00
S. Dak. School of Mines & Technology	---	9.50	5.00[1]	10.00
Average	---	$ 25.40	$ 5.00	$ 10.00
Private Institutions				
Augustana College	---	---	---	$ 3.50
Huron College	---	---	---	1.00[2]
Sioux Falls College	---	$ 28.00	$ 10.00[1]	5.00
Mount Marty College	---	---	25.00[1]	2.00
Dakota Wesleyan University	---	---	5.00	3.00
Yankton College	---	---	---	10.00
Presentation College	---	---	---	---
Freeman Junior College	---	---	---	5.00
Average	---	$ 28.00	---	---

[1]Charged only once.

[2]Per day.

TUITION, FEES, ROOM, BOARD, AND OTHER CHARGES (Continued)

Table 3 Continued

	Room Charge	Board Charge	Apartment Rental Charge	Books and Supplies	1967-68 Student Credit Hours
Public Institutions					
University of South Dakota	$ 300.00	$ 490.00	$ 585.00	$ 150.00	138,304
South Dakota State University	240.00	390.00	414.00*	150.00	168,087
Northern State College	288.00	428.40	---	100.00	102,134
Southern State College	300.60	436.80	495.00	80.00	33,762
Black Hills State College	261.00	340.00	---	80.00	66,968
General Beadle State College	250.00	420.00	---	54.00	37,804
S. Dak. School of Mines & Technology	234.00	492.00	---	215.00	45,750
Average	$ 267.65	$ 428.15		$ 118.45	
Private Institutions					
Augustana College	$ 300.00	$ 400.00		$ 100.00	62,696
Huron College	290.00	400.00		80.00	19,524
Sioux Falls College	250.00	412.00		112.50	28,375
Mount Marty College	200.00	450.00		100.00	14,748
Dakota Wesleyan University	300.00	427.00		100.00	25,308
Yankton College	350.00	500.00		80.00	19,346
Presentation College	250.00	380.00		50.00	7,768
Freeman Junior College	250.00	400.00		90.00	1,143.04
Average		$ 421.15		$ 89.05	
Average of All Institutions		$ 424.40		$ 102.75	

*Apartments range from $220.50 to 607.50--This is an average.

VOLUNTARY SUPPORT OF COLLEGES AND UNIVERSITIES
SOUTH DAKOTA AND UNITED STATES
SELECTED YEARS

Table 4

	Alumni	Foundations	Non-Alumni Individuals & Families	Business Corporations	Religious Denominations	Other Groups Other Sources	Total
1962-1963 Nation wide							
Contributions	$220,906,750	$212,719,999	$197,178,739	$146,687,587	$ 80,289,087	$ 53,580,202	$911,362,364
Percent	24.2	23.4	21.6	16.1	8.8	5.9	100.0
Current use							47.9
Capital use							52.1
Beneficiary							
Public	18.1	20.4	15.7	34.9	10.8	49.3	
Private	81.9	79.6	84.3	65.1	89.2	50.7	
1965-1966 Nation wide							
Contributions	$265,558,460	$304,107,178	$299,944,951	$195,705,256	$ 92,575,062	$ 71,903,211	$1,229,794,118
Percent	21.5	24.8	24.3	16.0	7.5	5.9	100.0
Current use							49.0
Capital use							51.0
Beneficiary							
Public	24.7	25.6	18.5	38.7	14.1	49.7	
Private	75.3	74.4	81.5	61.3	85.9	50.3	
1962-1963 South Dakota							
Contributions	$ 257,676	$ 38,953	$ 633,657	$ 256,117	$ 417,226	$ 18,154	$ 1,621,783
Percent	15.8	2.4	39.0	15.7	25.7	1.4	100.0
Current use							52.4
Capital use							47.6
Beneficiary							
Public	35.7	0	24.6	42.4	0	67.1	
Private	64.3	100.0	75.4	57.6	100.0	32.9	
1965-1966 South Dakota							
Contributions	$ 322,189	$ 48,690	$ 493,810	$ 269,006	$ 501,398	$ 131,141	$ 1,766,234
Percent	18.3	2.7	28.0	15.2	28.4	7.4	100.0
Current use							47.4
Capital use							52.6
Beneficiary							
Public	47.9	14.1	4.1	66.4	0	85.7	
Private	52.1	85.9	95.9	33.6	100.0	14.3	

SOURCES OF INCOME FOR EDUCATIONAL PURPOSES
INSTITUTIONS OF HIGHER EDUCATION
REGIONAL
SELECTED YEARS

Table 5

	Simpson College Study Central Association				
	1967-1968		1966-1967		1957-1958 Sixty College Study
	Public	Private	Public	Private	
Student Tuition and Fees	19.3%	72.0%	18.0%	73.5%	51.7%
Government Appropriations	58.8	.6	49.4	.7	12.1
Endowment Income	.6	7.7	1.0	6.7	19.6
Gifts and Grants	13.4	13.6	10.6	13.1	12.8
Other Sources	4.2	4.4	15.3	3.7	2.9
Organized Activities	3.7	1.7	5.7	2.3	.9
	100.0%	100.0%	100.0%	100.0%	100.0%

Local Government:

The following summary reports results of a questionnaire mailed to all public and private institutions of higher learning in the state of South Dakota. The questionnaire dealt with services and facilities that are provided by local governments for the institutions. Fifteen responses were received. All 15 institutions indicated that the local city provided fire protection; only two institutions were charged for this. Apparently few local governments are concerned about fire inspection. Most institutions reported that they were inspected by the State Fire Marshall's Office. One institution reported that the local fire department had toured all of their buildings in order to make plans of operation in case of fire.

Eight institutions reported that police protection is provided. Four said no protection was offered, but that they have their own. Two institutions said police protection was given upon request. There was only one institution that made direct payment for the protection provided. Eleven institutions reported that the local police cruiser will travel through their campus. Three institutions reported that the local police cruiser does not travel through their campus. One institution reported that the police patroled their campus upon request.

Institutional response to local on-campus street maintenance indicates that only one of the local governments will build streets on the campus. Two institutions reported street repair and another reported repair of the through street.

Institutions reported the following local assistance for sewage facilities and extension of sewer lines: Six institutions reported that local governments will build sewage processing facilities. All institutions reported that local governments will allow the institution to use the existing facilities. Seven institutions reported that local governments would not extend sewage facilities. Two institutions said local governments would extend sewage facilities at cost, while six said that these facilities were extended by the local city governments. Three institutions reported that the local city government will provide surface water drainage. According to the report, all of the local cities provide and sell water to the institutions. Five institutions reported that the city would extend water lines on campus. Two institutions are not within the corporate limits of their city and one only partially within the corporation. These institutions report that there is no pressure for them to become a part of the city.

Seven institutions report that they have to pay property taxes on houses or land not used for educational purposes. Five institutions reported that they are not subject to any local assessments. One reported assessment for a road to the campus. Nine reported assessment for frontage improvements such as water, sewer, etc. Apparently none of the institutions are subject to special assessment for watershed, flood control, soil conservation or other similar charges.

Generally speaking, most of the institutions received fire and police protection from the local governmental units. Most institutions also have available the use of sewage facilities and can purchase water from the local government. A number of institutions are subject to taxes on non-educational buildings and special assessments for direct improvements to the value of the property. It is, of course, difficult to determine the value of these special services, but they would amount to a considerable sum, not only in capital improvement, but in maintenance.

Federal Government:

The following Federal agencies account for more than 95 percent of all direct Federal support to universities and colleges:

Department of Agriculture
Atomic Energy Commission
Department of Health, Education, and Welfare
Department of Defense
Department of Commerce
Department of the Interior
National Aeronautics and Space Administration
National Science Foundation.

Total Federal obligations to universities and colleges amounted to $3,017.5 million in fiscal year 1966. Of this amount, support for academic science activities accounted for 72 percent and nonscience activities for 28 percent. Most of the latter amount was accounted for by the expansion of the Office of Education's program to provide aid for the construction of new undergraduate and graduate facilities in developing universities and colleges.

Within academic science, funds for research and development amounted to $1,257.6 million, while funds for R. & D. plant obligations amounted to $114.8 million; support for "other" science activities, mostly science education, amounted to $798.6 million and funds for non-science activities amount to $846.5 million.

Among agency sources, the Department of Health, Education and Welfare has greatly increased its lead as the primary source of Federal support to universities and colleges. In 1966 this agency accounted for 65 percent of the total support by the eight agencies. The Office of Education accounted for most of the increase in funds provided by HEW. OE obligations to institutions of higher education accounted for 31 percent of the eight-agency total in 1966. Obligations provided by the Public Health Service have also increased considerably during the past four years.

Support by the other seven Federal agencies was entirely for academic science activities, except for small amounts of nonscience support by the Department of Agriculture and the Interior. It should be noted that the National Science Foundation is the only agency besides OE whose primary function is closely associated with higher education. The National Science Foundation traditionally grants more than 75 percent of its funds for research, development, and R. & D. plant to universities and colleges. The Foundation is primarily concerned with the support of basic research (i.e., research oriented toward advancement of knowledge per se) and with the support of science education.

HEW and Defense lead in the support of research and development at universities and colleges. These two agencies together accounted for about two-thirds of the total in 1966. The remaining 36 percent of the funds were spread among the other agencies as follows: the National Science Foundation, 15 percent; the National Aeronautics and Space Administration, 7 percent; the Atomic Energy Commission, 7 percent; the Department of Agriculture. 5 percent; the Departments of the Interior and Commerce together, 2 percent. Associated with research and development is R. & D. plant, which is supported chiefly by the Foundation and HEW's National Institute of Health.

The amounts of funds obligated by each of the eight Federal agencies to universities and colleges increased in nearly all geographic divisions and states during 1963-66. It should be noted that most of the absolute increases and broadening of geographic distribution were provided by the Department of Health, Education, and Welfare. The Office of Education has become increasingly important as a source of growth for universities and colleges without strong, well-established science departments.

There is a noticeable tendency of a decline in the concentration of Federal funds in well-established centers of excellence, located primarily in a few geographic areas. While support of these centers has progressively increased, Federal assistance to new and developing universities and colleges has expanded rapidly.

Traditional yardsticks used to characterize the geographic pattern of Federal support of higher education include per capita distribution, student enrollment, and the relative number of degrees awarded by universities and colleges. These comparisons become increasingly important as Federal programs evolve that explicitly aim at expanding and strengthening academic institutions throughout the country, with greater emphasis on geographic distribution and creation of new centers of excellence.

A significant trend in Federal support of institutions of higher education is the decreasing relative magnitude of obligations for research and development. Recently, greater emphasis has been placed on Federal support of programs concerned with education in the sciences and nonscience activities.

The number of universities and colleges receiving Federal support has increased considerably during the recent years. In addition, there is a distinct trend toward greater dispersion in the amount of support to individual institutions. Consequently, Federal obligations have been less highly concentrated in a few universities and colleges in recent years.

The trend toward greater disposition of Federal support to more of the Nation's institutions of higher education was reflected in data for the top 100 universities and colleges receiving the largest amounts. These 100 institutions accounted for 70.4 percent of total Federal obligations in 1966,

compared to 85.4 percent for the same institutions in 1963.

One notable trend is the narrowing "gap" between amounts of Federal support received by the leading 100 institutions. Although each of the institutions received larger amounts of Federal support in 1966 than in 1963, the share of the national total accounted for by individual universities or colleges generally declined.

Generally, the institutions with large graduate programs within each State account for most of total Federal support to all universities and colleges, although there is a discernible trend toward greater financial assistance to undergraduate centers.

Because universities and colleges with the best available scientific and technical resources have been in a better position to meet qualifying standards, Federal support for academic science has been less widely dispersed than total Federal obligations. In recent years, however, there has been a noticeable tendency toward wider distribution of academic science support.

Generally, the universities and colleges awarding relatively large numbers of earned degrees in the sciences and engineering tend to be among the largest recipients of Federal support for academic science. To a considerable extent the institutions with well-established graduate programs are also those that have demonstrated competence in the conduct of research and other science-related projects for Federal agencies. Universities and colleges with the largest amounts of academic science support were generally those awarding the largest number of graduate degrees in the sciences and engineering. Implicit in this analysis is the implication that (because of the close relationship between Federal academic science support and graduate degree granting institutions, particularly those with Ph.D. programs) the primary means to provide broader distributions of support is through the creation of additional graduate centers of excellence within the Nation's institutions of higher education.

*Definitions**

Research is defined as scientific inquiry. It includes basic studies–those oriented toward deeper or more meaningful understanding and knowledge per se in a particular subject or field, and applied studies–those aimed at new or more complete knowledge in the light of potential practical application.

Development is the systematic use of scientific knowledge directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes. It excludes quality control, routine product testing, and production.

R. & D. plant includes all direct, indirect, incidental, or related costs resulting from or necessary to the construction of acquisition of, major repairs to, or alterations in structures, works, fixed equipment, facilities, or land for use in scientific research and development at a university or college, or at a Federal Contract Research Center. Fixed equipment includes accelerators, reactors, wind tunnels, radio telescopes, etc.

Other academic-science activities represent obligations for all other activities that are science-related but not included elsewhere. Included are obligations to a university or college that represents direct funding (excluding repayable loans) of science-related activities for purposes such as scholarships, fellowships, traineeships, institutes, course-content improvement projects and other science education pursuits; facilities and equipment to be used primarily for education activities; collection, storage, handling, and dissemination of scientific and technical information; and institutional grants for general or specific purposes.

Nonscience activities include all support of fields of endeavor at universities and colleges other than those specified as academic science.

Federal Support to Universities & Colleges, Fiscal Years 1963-66.
National Science Foundation

Appendix B: Concept and Categories

CONCEPT AND CATEGORIES

The basic concept of the cost system is eventually to reduce all costs for higher education institutions to a common frame of reference through an educational cost analysis by subject matter, by class level, and by program.

Within the instructional and related programs, results will be measured in terms of finances, students, curriculum, faculty and space, using a series of formulas and allocations to determine the costs of each activity and subject matter by level. This procedure will provide adequate historical cost information to project and forecast the components of future expansion, changes in subject matter emphasis, enrollment fluctuations and corresponding space requirements.

The development of uniform terminology common to all schools, will make it possible to collect the necessary data irrespective of the individual institution's chart of accounts or of the nomenclature used by the individual schools in identifying courses offered. This would require assignment of a course number to each course which will place every course within the proper activity at the proper level.

The following paragraphs briefly define what costs the programs contain.

–***General administration*** includes all direct expenditures incurred in the administrative processes of the institution's programs, i.e., the President's Office, Business Office, Property Control, etc.

–***General expense*** includes all expenditures for general services to an institution, such as the alumni office, university publications, public events, institutional memberships, and would include all expenditures for assistance provided to students in areas such as registration, counseling and guidance, admissions, student aid, etc.

–***Department instruction and research*** includes all direct expenditures of the departmental instruction program. Summer session instructional expenditures should be included, as well as expenditures for clinics which are operated as an integral part of the instructional program.

–***Off-campus instruction*** includes all direct expenditures for branch instruction. Off-campus programs may be defined as those in which credit courses are offered at a center located away from the main campus.

In addition, the category should include any expenditures incurred for in- or out-of-state instructional programs operated for the Armed Forces where credit toward a degree may be earned, extension classes, correspondence courses, and special off-campus instructional activities where credit is offered.

–***Organized Activities Relating to Educational Departments*** includes all expenditures for teaching aids, such as audio-visual service, computer laboratory, or research on the instructional program itself.

–***The research*** category comprises all direct expenditures for separately budgeted research. This includes, but is not limited to, university-sponsored research, federally sponsored research, and research sponsored by commercial firms and public foundations.

–***The Extension and Public Service*** category includes all expenditures for public service projects which are not part of the institution's continuing instructional program. This would include Educational Television, radio, workshops, clinic, etc.

–***Library*** includes all expenditures for the main institutional library and any departmental libraries which are supervised by the institution's chief librarian.

–***Physical Plant*** includes all expenditures incurred in operating and maintaining the physical facilities, both building and grounds, of the institution.

–***The Auxiliary Enterprises*** category includes all direct operating expenditures for such purposes as residence and dining hall, student union, bookstore, athletic facilities, student health services, etc. It also includes payment for interest on indebtedness. The system allows for separate and composite analysis of

state owned and self-liquidating enterprises.

The costs for the programs listed above follow the same format as the financial reports which are used to obtain the cost data for allocation. They are allocated on one of four bases – ***faculty time, enrollment, curriculum*** and ***space utilization.*** The necessary types of data are briefly as follows:

–The percent of time spent by each member of the faculty in Administration, Research, and instruction by activity, subject matter, and by class level of students (from the Faculty and Staff Service Reports).

–The number of classes and students per activity level by subject matter.

–The number of class contact hours per activity, class level by subject matter.

–The number of students credit hours enrolled per activity, class level by subject matter.

–The number of students enrolled per activity class level by subject matter.

–Classroom utilization by activity by class level by subject matter.

–Net assignable space utilized by instructional activity, type of space, and major program (such as Auxiliary Enterprises).

COST ALLOCATION PROCEDURES: are developed on a step basis. The succeeding appendices explain in detail each of the following steps:

Step No. 1 – Capital Equipment Expense
Step No. 2 – Physical Plant
Step No. 3 – General Administration
Step No. 4 – General Expense-Student Services
Step No. 5 – General Expense-Institutional Costs
Step No. 6 – Library
Step No. 7 – Auxiliary Enterprises
Step No. 8 – Expenses Implementary to Students
Step No. 9 – Instructional Organized Activities Relating to Instruction

Appendix C: Cost Allocation Procedures: Steps 1-9

Cost Allocation System

Capital Equipment Expense–Step No. 1

The acquisition of capital assets presents a comparative cost problem as the benefits from these expenditures extend over more than a one year period. The present policy simply charges the expense in the year which incurred. This causes wide fluctuations in cost and makes the process of analysis quite erratically inconsistent.

The proposed system of capital equipment costs' allocations has the same effect of depreciating the extended benefits of these assets without maintaining a detail depreciation record for each piece of equipment. This is accomplished by first determining the *total* value of equipment for each division of an activity as of the first day of the fiscal year; these functional totals are then utilized in developing a percentage factor for each department's capital investment in relation to the total investment for the institution. The procedures call for the accumulation of current fiscal year's capital outlay by activity function and applying the percentage ratio as developed above to provide the adjusted capital equipment annual cost factor. (Table 6 and Flow Chart 1) This cost figure would not be used in updating the activity's inventory value; just as a computed amount applicable to cost analysis. The third procedure is the allocation of the activity capital equipment down to the subject matter level. This is achieved by taking student population and dividing this total into the capital cost for the activity to arrive at an average cost per student. This average cost is multiplied times the student head count in each course with the resultant amount of total capital cost by subject matter. The student population for laboratory courses is weighted by two in comparison to lecture courses due to the necessary additional equipment costs required by subject matter of this nature. This procedure is applicable to cost analysis but not necessarily applicable to funding at present.

Allocation of Capital Equipment Expense

Table 6

Dept.	Inv. 6-30-67	% of Total	FY 1967 Expenditures	Cost Allocation
A	$ 500.00	1.32	$ 100.00	$ 184.80
B	1,500.00	3.95	300.00	553.00
C	1,000.00	2.63	600.00	368.20
Others	35,000.00	92.10	13,000.00	12,894.00
	$ 38,000.00	100.0%	$ 14,000.00	$ 14,000.00

Percent of total inventory x Fiscal Year total Expenditures = Averaged Fiscal Year Cost.

Allocation of Dept. B Expense to Courses

Table 7

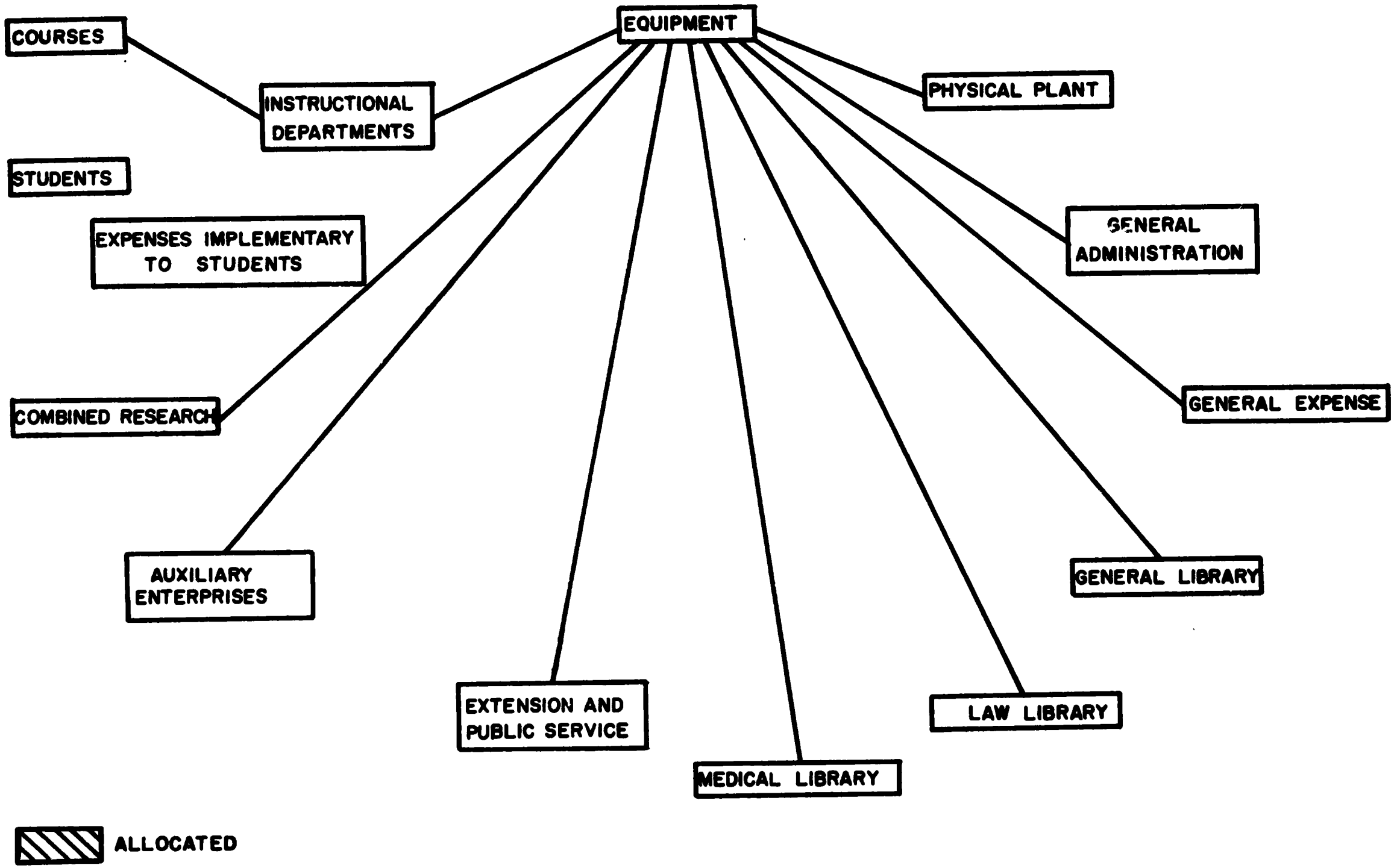
Course	Type	Students	Weight	Weighted Students	Cost per Weighted Student (1)	Allocated Course Cost
D	Lecture	50	1	50	$ 2.911	$ 145.53
E	Lab.	35	2	70	2.911	203.75
F	Lab.	15	2	30	2.911	87.30
G	Lecture	40	1	40	2.911	116.42
				190		$ 553.00

Students x Weight = Weighted Students x Cost = Course Cost

(1) Dept. B = $\frac{\$553.00}{190}$ = $2.911

Flow Chart 1

ALLOCATION OF CAPITAL EQUIPMENT EXPENSE



ALLOCATED

Physical Plant–Step No. 2

The nature of each institution's physical plant costs consists basically of:

1) Capital Outlay
   a) Land
   b) Land Improvements
   c) Buildings
   d) Building Improvements and Deferred Maintenance

2) Operational Costs
   a) Operation and Maintenance
   b) Repairs

The allocation of operational costs is quite easily achieved as it is based on space utilization. The recognition of long term capital costs for land improvements, building and building improvements on an annual depreciable basis has not been considered in the past or present as part of higher education costs. The time has come when this cost must be integrated into financial analysis. The following theories and facts should be considered on this subject before arriving at any conclusion.

The matter of depreciation of college buildings has received considerable attention. Many accountants feel depreciation practices similar to those followed in commercial accounting should be adopted by colleges, while others argue there is not sufficient need in college financial administration for depreciation.

The Committee on Terminology of the American Institute of Certified Public Accountants has defined depreciation accounting as a system of accounting which aims to distribute the cost of tangible capital assets over the estimated useful life of the unit in a systematic and rational manner. It is a process of allocation and not of valuation.

Positions taken by accountants concerning depreciation have varied with the different types of plant assets considered. Colleges have three types of plant assets: educational plant, plant used for auxiliary income-producing enterprises and property representing the investment of endowment.

At present, very few colleges depreciate educational property; depreciation of the auxiliary plant is much more common.

By not including the cost of depreciation as an operating expense, colleges understate the educational cost per student. With tuition charges increasing rapidly, the private college should be in a position to disclose the educational cost per student as a basis for comparison with tuition charged. As pointed out by the National Committee on Standard Reports; new plant assets are funded from building campaigns. At one time income and expense of colleges were in balance, and gifts received by colleges were used for new plant additions. Today, with the cost of operations increasing faster than tuition, many colleges rely on gifts to cover excesses of expense over income. The result is that the need for meeting budget deficits competes with the need for additional plants–for the same dollars. By understating current operating expense, with the exclusion of depreciation, the college shifts the financial burden to future periods when both additional plant and the funding of large deficits must be met. Additional plant results in greater expense in that for each dollar of new construction, dollar of additional maintenance expense is incurred over the life of the building.

When depreciation expense is recorded funding should be provided to ensure asset retention, probably through reserves in the plant fund section.

The long life of college plant increases the problem of price level adjustment. Depreciation charged over the years does not result in the retention of assets having a purchasing power equal to that required for future asset replacement. The problem of declining purchase power may be overcome by use of an index, because plant asset cost level, and information concerning construction indexes is readily available. Such an approach may be subject to criticism in that it departs from the "cost principle" which relies on objectively determined historical cost although replacement cost may be more relevant.

Auxiliary income-producing properties present

an even greater need for depreciation. Such activities, not directly related to educational activity, should be self-supporting. In determining whether or not they are self-supporting, all items of expense must be considered. As in the case of educational plant, the depreciation should be funded.

Asset valuation presents a different problem because a balance sheet does not represent the worth of a company. The fact that the actual goodwill is not recorded on the balance sheet is a major reason for this. In addition, the balance sheet is a collection of historical assets, recorded at cost, over a period of time. It should be understood from the outset that financial position or balance sheet statements do not purport to show either present values ot assets to the enterprise or values that might be realized in liquidation.

The reporting of assets at replacement value is presently receiving support from some accountants. The idea is rejected by the majority of accountants for several reasons: the degree of subjectivity required, irrelevancy in the case of certain assets, and uncertainty, as would be found in the recording of inventory assets at market price prior to sale. Such difficulties can more easily be overcome in college accounting.

The subjectivity problem can be solved without too much difficulty. College assets are segregated into four groups: current, endowed, loan and plant.

The current assets consist mainly of cash, accounts receivable, and short term investments. All of these assets are at market value.

The endowed assets are primarily in the form of cash or consolidated investments. Many colleges disclose the consolidated investments at both cost and market.

The loan assets consist of outstanding loans, cash and investments which can be recorded at market value.

The plant assets are made up of cash, investments, equipment, buildings, land and possible receivables. This section requires the greatest amount of effort in conversion to replacement cost. Replacement value information pertaining to buildings is usually available from insurance studies. In the case of land, appraisals would not be difficult to obtain.

A strong case can be made for recording college assets at replacement value. A single consideration is presenting the realistic financial information. With profit and taxation problems nonexistent, the college should make every effort to disclose assets at their true values, to the greatest extent possible. If an endowment fund consists of assets having book value of $50,000, and a market value of $200,000 the relevant figure is that of market value. The donor may have established the fund 10 years ago, and reporting the book value of the fund to him 10 years later is meaningless.

In the case of plant assets, recording buildings at historical cost results in understating the value of older buildings, as compared with costs of more recent buildings. Replacement cost would give the reported figures meaning. The same position taken in the previous discussion of endowed funds applied to plant funds. A donor may make a gift of $10,000 for the construction of a new chemistry building. It is possible that the building may not be constructed for several years. The $10,000 donated and invested in plant assets may be worth $15,000 by the time the building is constructed. To continually report the gift at cost serves no useful purpose.

The Cost Committee presents the following procedure for proper accounting of capital assets other than equipment:

1) That Balance Sheet values be at cost with replacement values shown parenthetically.
2) That depreciation costs be computed on present values, with rates as established by individual Boards of Control.
3) That depreciation charges be separately funded.

The allocation of the total physical plant operating costs should be allocated on a basis of net-assignable square footage in each program.

The primary types of space (categories) have different levels of subsistance requirements. These have been determined as follows:

	Weight Factor
1) Classroom space	_____
2) Dormitory and auxiliary area	_____
3) Office area	_____
4) Instructional laboratory	_____
5) Research Laboratory	_____
6) Library	_____

The weighted square footages are determined by multiplying the assignable square footage of each of the primary types of space by the weight factor. The total physical plant cost is divided by the weighted square footage to determine the cost per weighted square foot which is multiplied by the weighted square footage of each of the primary types of space to determine the cost of each type of space.

The office space physical plant costs are allocated to the other programs and the instructional departments on the basis of their assignable square footage of office space. The department's office space physical plant costs are allocated to the courses taught in the department on the basis of FTE faculty. (See Flow Chart 2)

The classroom and instructional laboratory physical plant costs are allocated to the courses on the basis of a weighted square footage obtained by multiplying the fiscal year course contact hours by the classroom or laboratory square footage. (See Flow Chart 3)

The library physical plant costs are allocated to the various libraries, research laboratory costs to organized research, and dormitory costs to auxiliary enterprises. (See Flow Charts 4, 5 and 6 respectively)

Cost per Type of Space

Table 8

Type of Space	Assignable Square Foot	Weight Factor	Weighted Square Foot	Cost per Weighted Square Foot	Cost per Type of Space
Office Area	64,880	1.25	81,100	$.957	$ 77,605
Classroom Space	66,510	1.00	66,510	"	63,641
Instructional Laboratory	74,650	1.50	111,975	"	107,150
Library	87,620	1.25	109,525	"	104,808
Research Laboratory	21,060	1.50	31,590	"	30,225
Dormitory and Auxiliary Area	149,820	1.10	164,802	"	157,706
			565,602		$ 541,135

Note: Consideration to type of building in addition to room type in determining weighted costs should be given.

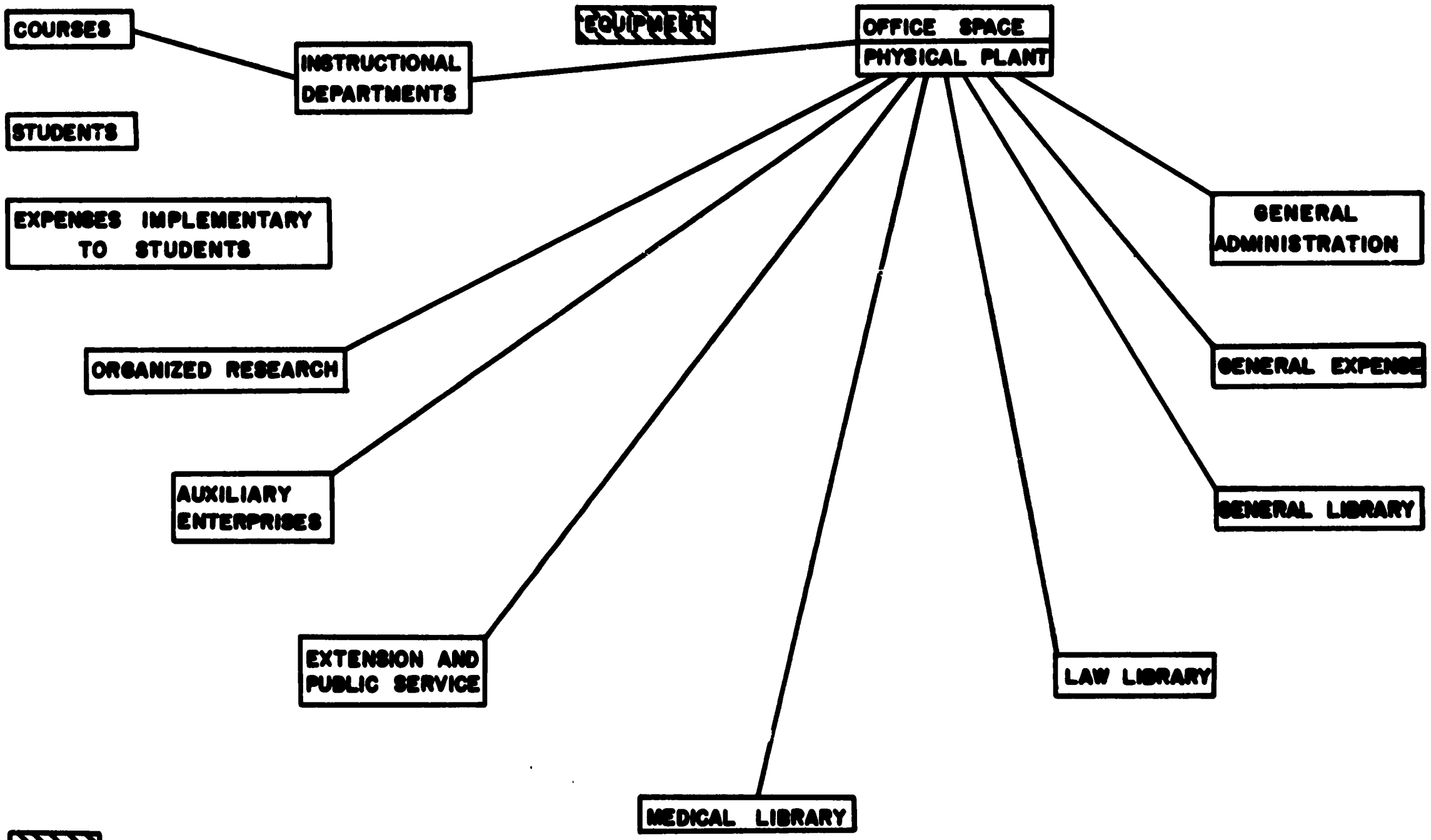
Allocation of Classroom and Instructional Laboratory Physical Plant Costs

Table 9

Course	Classes Per Week	Weeks Per Year	FY Course Contact Hours	Square Foot of Class Space	Weighted Square Feet	Percent of Total	Allocated Physical Plant Cost
A	4	18	72	400	28,800	.0268	$ 45.77
B	3	36	108	500	54,000	.0503	85.91
C	5	8	40	300	12,000	.0112	19.13
Others			1,100	97,500	107,250,000	99.9117	170,640.19
					107,344,800	100.0000	$ 170,791.00

ALLOCATION OF OFFICE SPACE–PHYSICAL PLANT EXPENSE

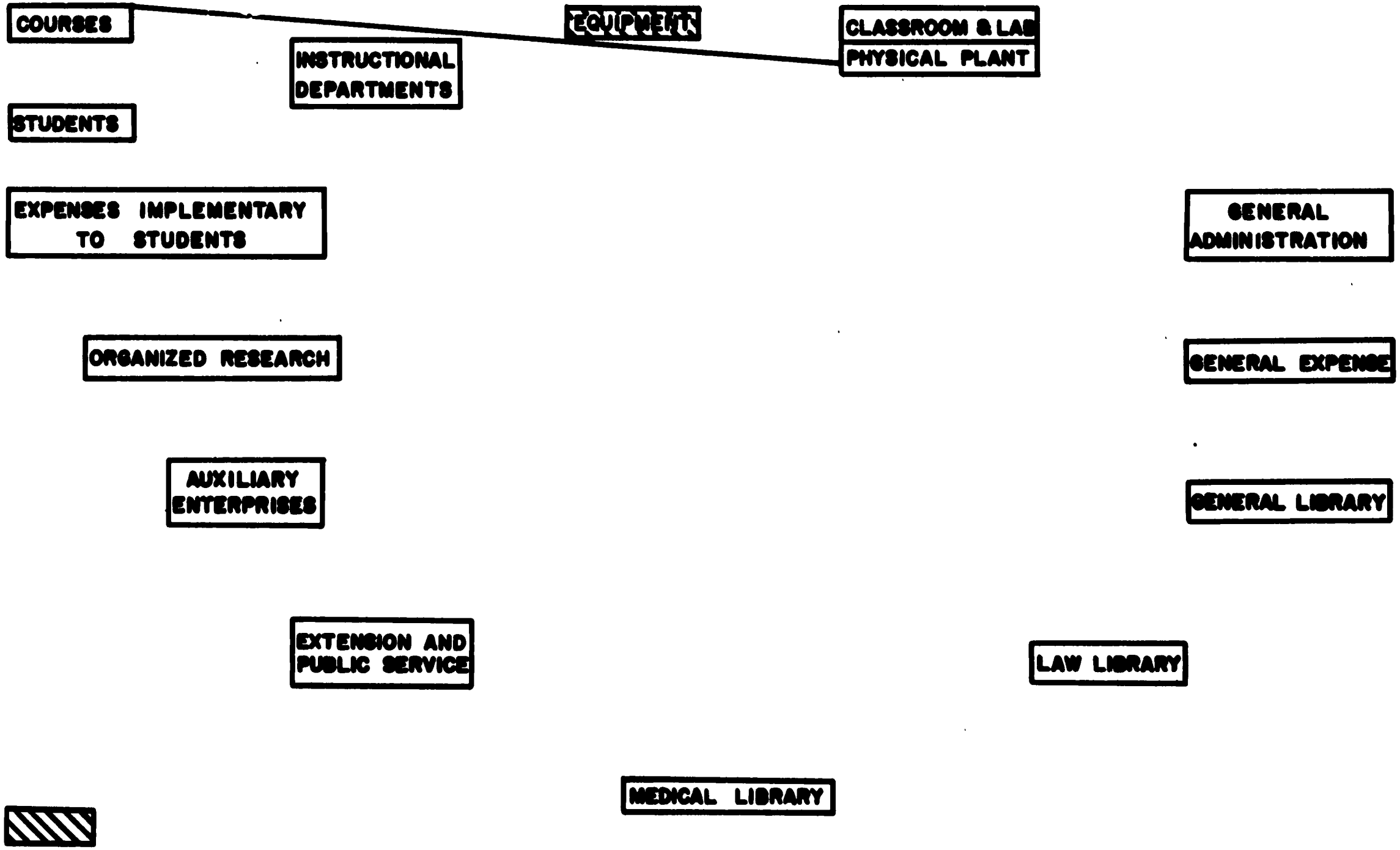
Flow Chart 2



2

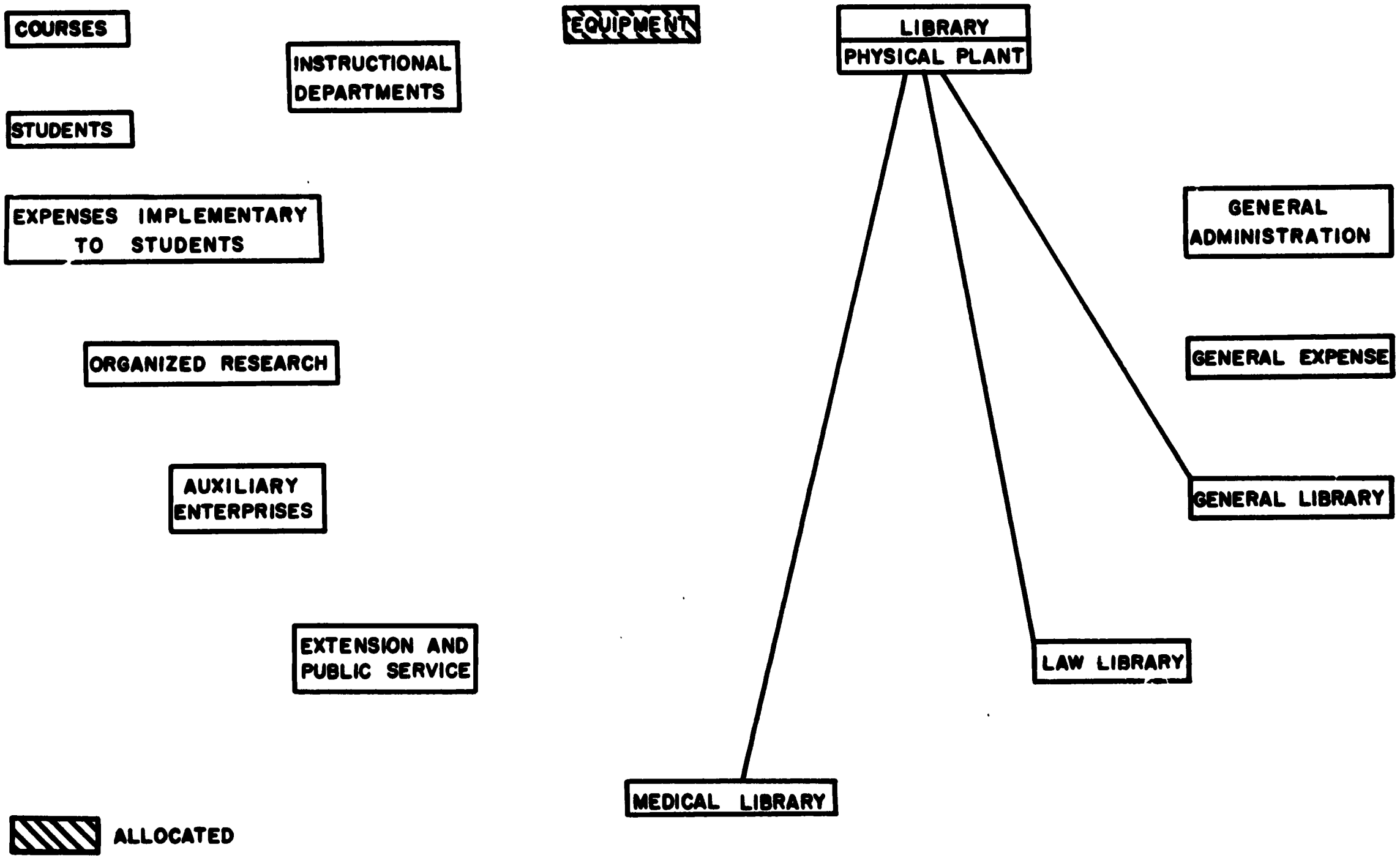
ALLOCATION OF CLASSROOM AND INSTRUCTIONAL LABORATORY EXPENSE

Flow Chart 3



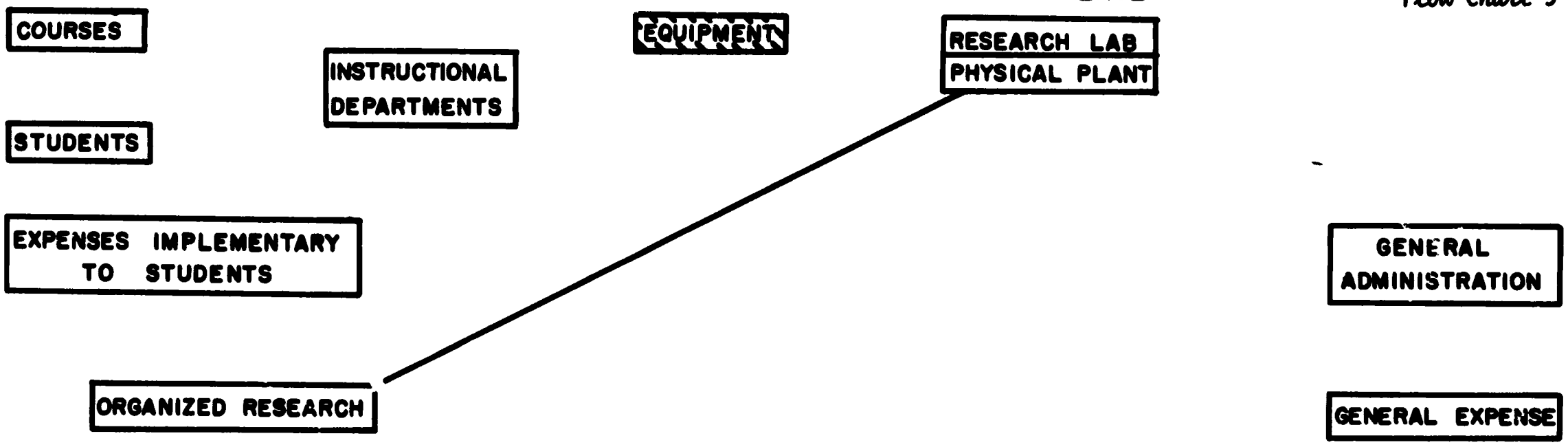
ALLOCATION OF LIBRARY— PHYSICAL PLANT EXPENSE

Flow Chart 4



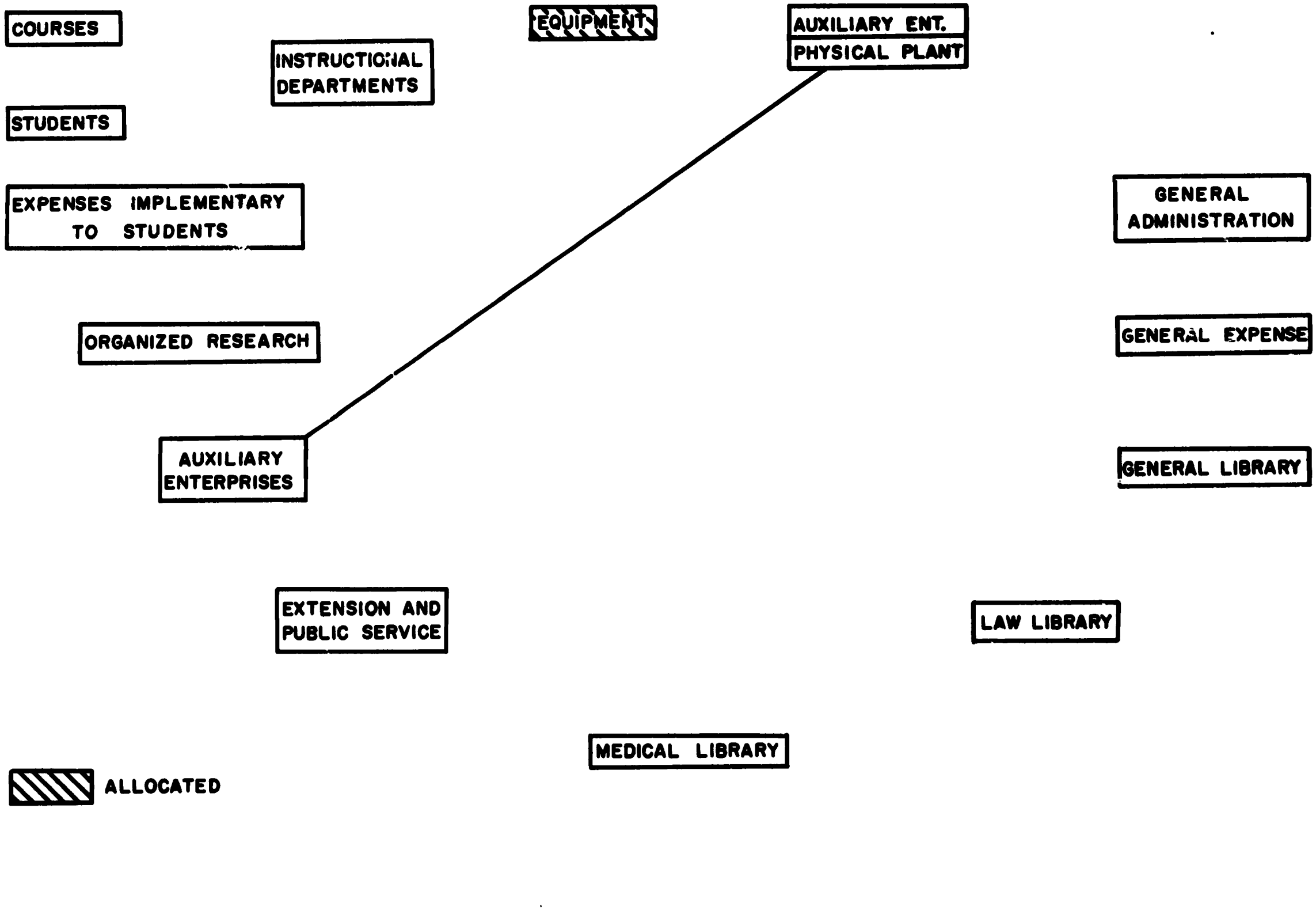
ALLOCATION OF RESEARCH LABORATORY EXPENSE

Flow Chart 5



ALLOCATION OF DORMITORY—PHYSICAL PLANT EXPENSE

Flow Chart 6



Cost Allocation System

General Administration Step No. 3

This program includes all expenditures of the general executive and administrative offices serving the institution as a whole, not including, however, the expenditures of the general library nor those for the operation and maintenance of the physical plant.

All expenditures, such as salaries of officers, secretaries and clerks, office expense and supplies, travel, and office equipment of the general executives' offices concerned with the administration of the institution as a whole should be included here. Examples of such offices are those of the governing board, president, vice-president, dean of the faculty, business officer, treasurer (if separate from business officer), and legal counsel, if an officer of the institution. (See also Legal Expense, under General Expense).

When an institution maintains a separate office for the administration of investments, the expenditures of that office should appear as a separate item in this category rather than as expenditures of the business office or of the treasurer's office.

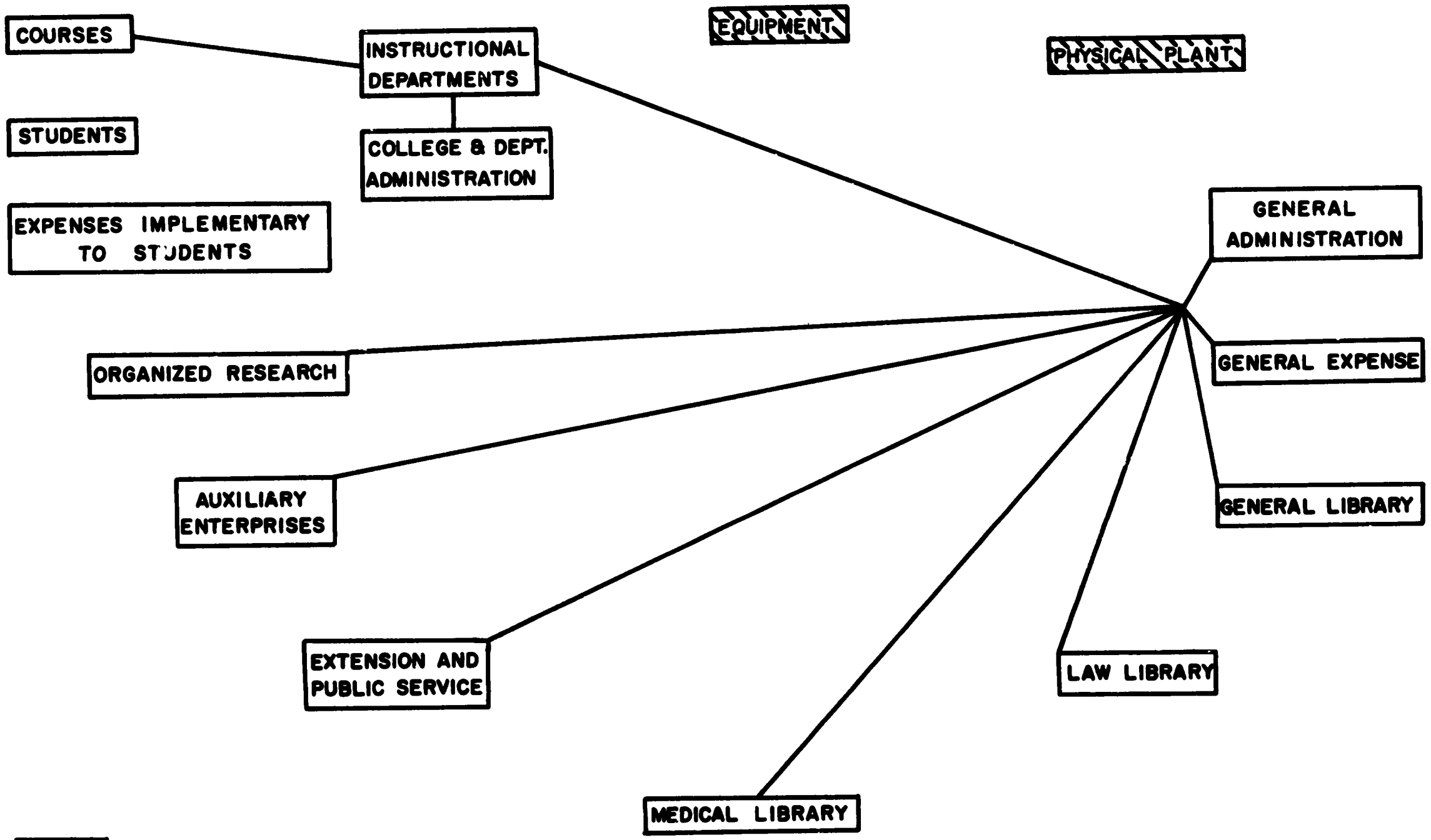
Administrative expenditures appropriately chargeable directly to Auxiliary Enterprises or to Organized Activities Relating to Instructional Departments should not be reported here, but should be included with the expenditures of the appropriate activity. However, administrative costs and general expenses which are to be prorated to auxiliary enterprises and organized activities may be included in the gross expenditures reported under General Administration and General Expense and shown as a deduction therefrom and as an expense of the appropriate auxiliary enterprise or organized activity.

The general administrative expenses are allocated to the remaining programs and the instructional activity on the basis of each program dollar expenditures and, each activity pro-rata share of their total original budgets or actual direct financial cost plus the previous overhead allocations to such programs and activities. The theory for this allocation is based on the fact that administrative expenses vary in proportion to the volume (population) and dollars are related to this volume. The measure of dollar amounts as the apportioning factor for these indirect costs is justified as the population of each program dictates the need for dollars.

The department's or division's share of the general administrative costs is combined with the department's share of it's own administration (based on the department's or division's pro-rata share of its' college's budget) and allocated to the courses taught by the department on the basis of the number of students registered by subject matter. (Flow Chart No. 7)

ALLOCATION OF GENERAL ADMINISTRATIVE EXPENSE

Flow Chart 7



Student Services–General Expense–Step No. 4 and 5

This program includes all other expenditures, exclusive of general administration, general library and physical plant, which are of a general character not relating to any specific division of the institution.

Expenditures reported under this heading may be classified as follows:

1) Student Services
2) General Institutional Expenses.

Under Student Services will be included expenditures for services to the student body as a whole. Examples are the health service (where not an auxiliary enterprise), guidance program, counseling, placement bureau, student activities financed from institutional funds, student employment office, registrar, dean of students, dean of women, and dean of men. If any of these offices, such as the registrar, is considered to serve primarily general administrative purposes rather than students, such office may be included under the heading General Administration. Thus, the classification of these items will vary according to the institutional organization.

Under General Institutional Expenses are included other current expenditures of the institution as a whole, exclusive of libraries and physical plant operation and maintenance. Examples are: alumni office, auditing (where not considered a business office expense), bulletins, catalogues, commencement, contributions to cooperative educational undertakings, convocations, diplomas, editor, financial campaign, general insurance (such as public liability and fidelity), general lectures, general publications, inauguration, information office interest, legal expense (if legal counsel is not an officer of the institution), public relations, memberships, receptions, telephone and telegraph, and travel (Where not charged as departmental expense).

Student Services Allocation:

The costs of the student services is quite significant and directly related to the enrollment population, thereby, requiring a segregation for informational purposes. This segregation shall be made following the allocation of Physical Plant expenses to a cost center designated as "Expenses Implementary to Students". (Flow Chart 8) This center shall include the following costs: Admissions, Registrar, Student Counseling, Dean of Men, Dean of Women, Housing and Food Services, General Administration, Computer Costs for Maintaining Student Records, Financial Aid, Personnel and other services *directly* related to the student and classified as general expense.

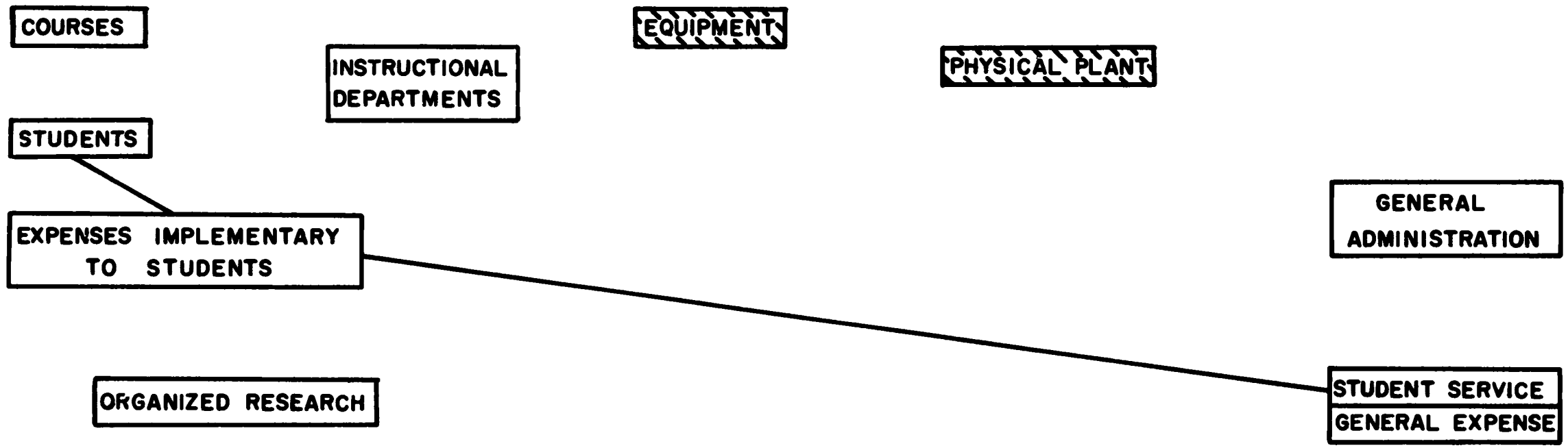
The identity of this cost shall remain intact throughout the allocation process and in the final stage of analysis shall be added to the instructional costs for students to provide the total per student cost picture.

General Expense Allocation:

The general expense (after segregating Student Services) is allocated to the remaining programs and the instructional activity on the basis of each program dollar expenditures and each activity pro-rata share of their total original budgets or actual direct financial cost plus the previous overhead allocations to such programs and activities (Flow Chart 9). The theory for this allocation is based on the fact that general expenses vary in proportion to the volume (population) and dollars are related to this volume. The measure of dollar amounts as the apportioning factor for these indirect costs if justified as the population of each program dictates the need for dollars.

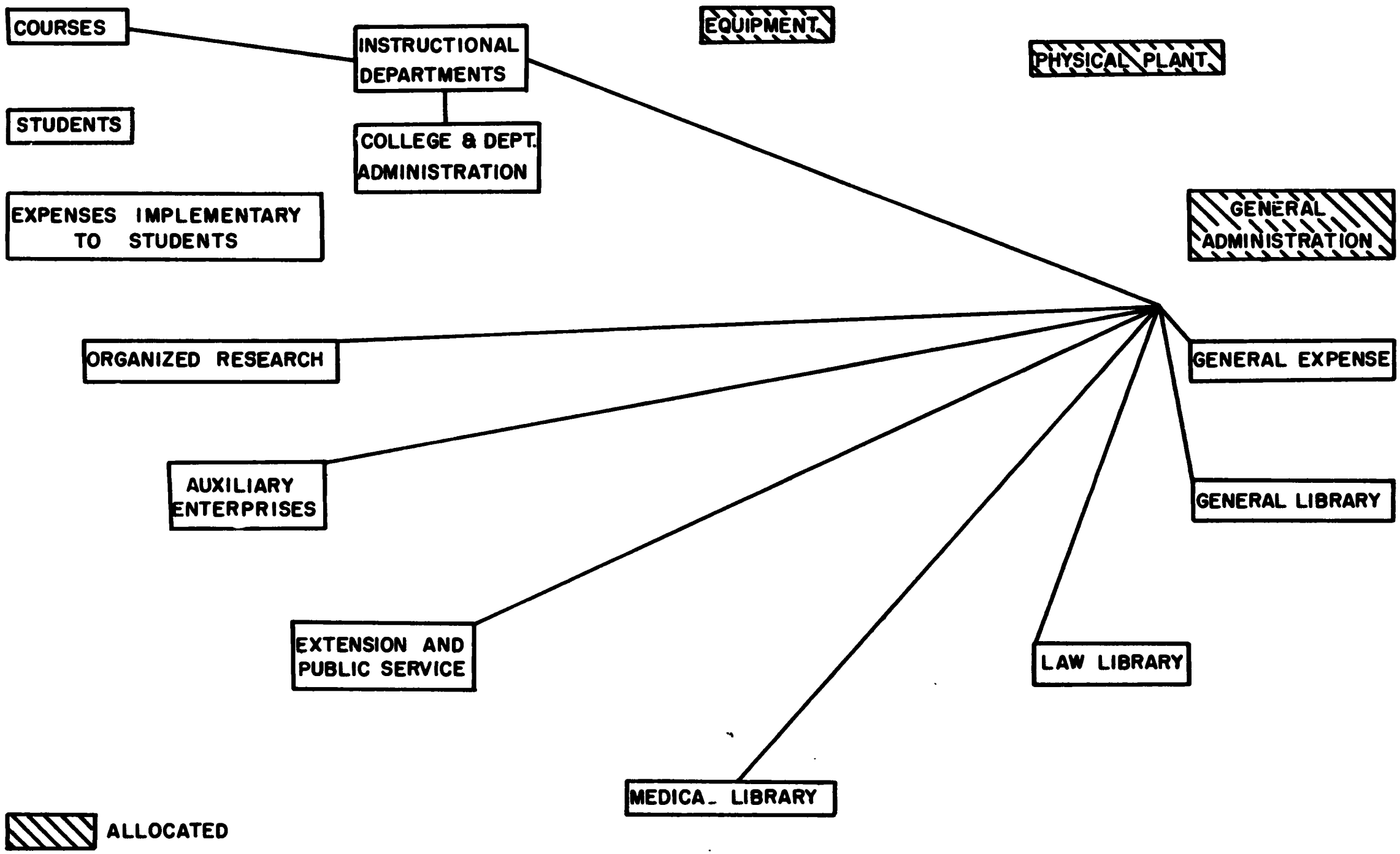
ALLOCATION OF STUDENT SERVICE EXPENSE

Flow Chart 8



ALLOCATION OF GENERAL EXPENSES

Flow Chart 9



COST ALLOCATION SYSTEM

Library Step No. 6

The general library of the Institutions contains several varying elements of costs. The classifications most meaningful to the cost allocation system revolves around the utilization by class level and faculty. The usage by class levels in terms of percentages in relation to total costs is allocated to "Expenses Implementary to Students" by fields of study and student population. The usage by faculty is apportioned directly to subject matter or sponsored research on a FTE faculty statistical basis (Flow Chart 10). The justifications for these procedural steps revolves around thoughts that library costs, as applicable to the academic student, are implementary and in addition to the costs directly accumulated in the instructional program. The faculty usage relates to instruction and accordingly is charged directly to subject matter or sponsored research.

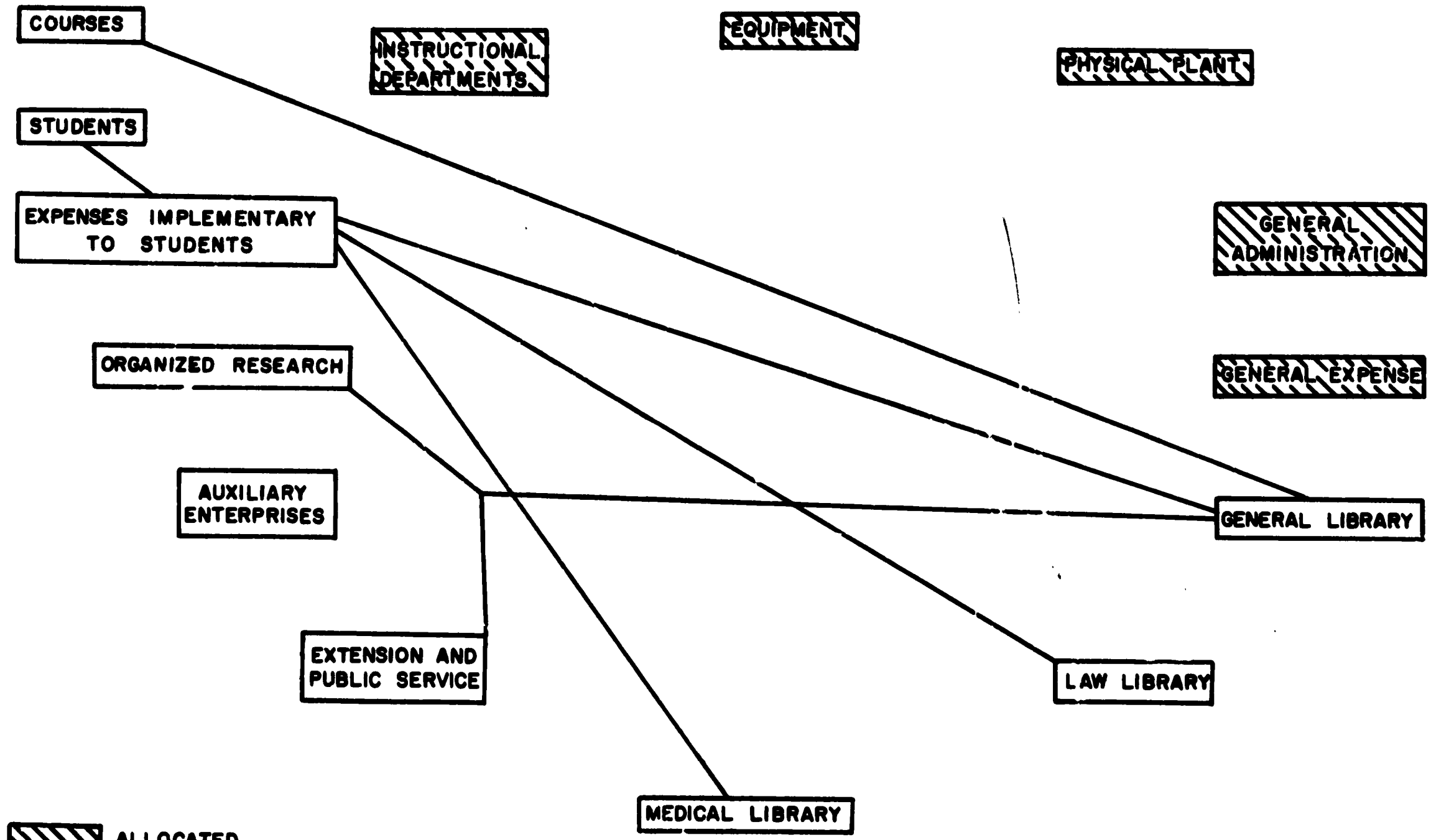
The institution that has functional libraries such as law and medicine will allocate their expenses to "Expenses Implementary to Students" by subject matter and on a student population basis.

The Library costs allocation factors are:

Freshman-Sophomore	____ %
Junior - Senior	____
Masters	____
Doctorate	____
Instruction Faculty	____
Research Faculty	____
Extension & Public Ser.	____

ALLOCATION OF LIBRARY EXPENSE

Flow Chart 10



Cost Allocation System

Auxiliary Enterprises—Step 7

The Auxiliary Enterprises program is designed primarily to serve students with some benefits to faculty and staff. "Organized Activities" relate directly to the instructional program, and their primary purpose is to provide professional training for students. These activities may or may not be self-sustaining, the degree of self-support depending upon institutional policy.

Usually dining halls, cafeterias, refectories, snack bars, residence halls, dormitories, student unions, and bookstores are operated as auxiliary enterprises. Examples of organized activities are medical school hospitals, home economics cafeterias, and agricultural college creameries. Intercollegiate athletics may be operated as an auxiliary enterprise or as an organized activity of the department of physical education, depending upon institutional policy.

Inasmuch as the primary objectives of certain activities may change over a period of time, it is desirable to review periodically the nature and scope of auxiliary enterprises, organized activities, and departmental activities, in order that they may be properly classified.

Statements of Auxiliary Enterprises:

It is good practice to support the income and expenditure statements of auxiliary enterprises with detailed statements for each enterprise. For internal use, such statements are essential to ascertain the degree of self-support attained, and to provide the proper controls. Separate balance sheets for the auxiliary enterprises should be prepared also for internal use.

All income and expenditures properly chargeable to these enterprises should be entered and included in the financial statements. Such expenditures should include a proper allocation of the general administrative, general institutional, and the physical plant expenses. Proper charges for service rendered to each enterprise by other divisions of the institution should be included also.

It is desirable to provide annually out of income for renewals and replacements of equipment and for major repairs of buildings used by auxiliary enterprises. These provisions should consist of fixed annual charges entered as expense and credited to a reserve in Current General Funds, or, preferably, transferred to a reserve account in Unexpended Plant Funds. It is desirable that this reserve be funded, and usually this can be done more effectively if the reserve is in the unexpended plant funds group. Expenditures for replacements of equipment and for major repairs to buildings should then be reported in the Statement of Unexpended Plant Funds as a charge against the reserve so provided, and not as an expenditure of the auxiliary enterprises. Routine repairs to buildings and all equipment repairs should be entered as current expense.

The necessity for making provision out of income for the replacement of buildings used for auxiliary enterprises will depend upon the financial program of the institution. If such provision is made, a fixed annual charge will be entered as expense of the appropriate auxiliary enterprise and transferred to the account for Renewals and Replacements in the unexpended plant funds group. This reserve account should be funded.

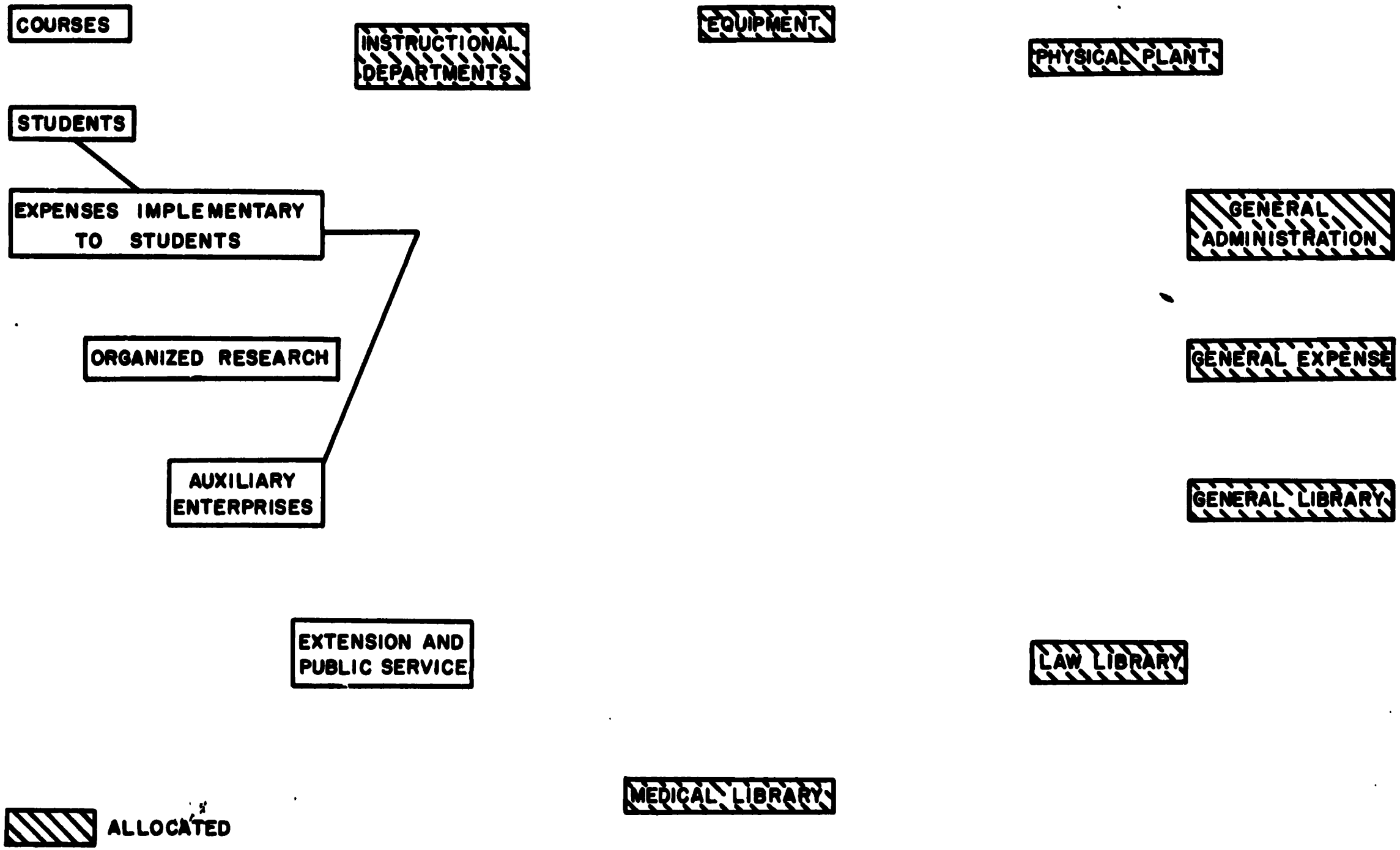
If endowment funds have been invested in plant used for auxiliary enterprises, provisions for the amortization of this investment should be made.

Expenditures for additions to plant, including building additions and improvements, and expenditures for additional furniture and equipment, should not be included as expense, but should be reported in the Statement of Unexpended Plant Funds.

The financial nature of these accounts is substantially a self-sustaining basis; however, they do require indirect costs such as physical plant and general administration which would be allocated on the basis of total auxiliary enterprises expenditures. The allocation of auxiliary enterprises to "Expense Implementary to Students" would be on a net basis after their respective income amounts are subtracted from the expenditures. The net result of the allocation could be either positive or negative depending on the managerial abilities in arriving at profitable levels (Flow Chart 11).

ALLOCATION OF AUXILIARY ENTERPRISE EXPENSE

Flow Chart 11



Cost Allocation System

Expense Implementary to Students - Step 8

The total costs that are implementary to support a student, other than instruction, are now accumulated and ready to be distributed. These expenses are then allocated to all the students by subject matter and level based on student population. The institutions that have specific instructional areas such as law and medicine would allocate the expenses applicable to them only, before making the general distribution. (Flow Chart 12) When financial, operational and statistical information is available at this level of operations, and the information is accumulated based on computer utilization, the amounts of diversified analysis is almost unlimited. The costs of this particular allocation is maintained separately to emphasize the actual non-instructional costs incurred in serving each student.

ALLOCATION OF EXPENSES IMPLEMENTARY TO STUDENTS

Flow Chart 12

COURSES

STUDENTS

EXPENSES IMPLEMENTARY TO STUDENTS

ORGANIZED RESEARCH

AUXILIARY ENTERPRISES

EXTENSION AND PUBLIC SERVICE

INSTRUCTIONAL DEPARTMENTS

EQUIPMENT

PHYSICAL PLANT

GENERAL ADMINISTRATION

GENERAL EXPENSE

GENERAL LIBRARY

LAW LIBRARY

MEDICAL LIBRARY

ALLOCATED

Instruction, Organized Activities Relating to Instruction - Step 9

The instruction and departmental research program should include all current expenditures of the instructional departments, colleges, and schools of the institution. These expenditures include the salaries of college deans, faculty members, secretaries and technicians, office expenses and equipment, laboratory expenses and equipment, and other departmental expenses. (Table 10)

Expenditures incurred for instructional programs for students pursuing regular courses of study which lead generally to a collegiate degree, whether offered off campus or on campus under the jurisdiction of an extension department, should be included under this heading.

Amounts reported under this heading should include expenditures for research not separately budgeted or financed. Separately budgeted, organized, or financed research expenditures should appear under the heading Organized Research or under Contract Research and Services.

If departmental research expenditures are not of major magnitude, this heading may read "Instruction".

If the institution is not divided into colleges or schools, the departments of instruction should be listed. The colleges, schools, divisions, or departments may be listed in this statement or the expenditures may be listed in this statement or the expenditures may be summarized and the details reported in subsidiary statements.

Expenditures for museums should be included with expenditures of the departments of instruction which the museums serve. Museums which are organized to serve the entire institution may be shown under a separate main heading or under General Institutional Expenses. Museums which are primarily of a public service nature may be reported under Extension and Public Services.

The "Organized activities" program relates directly to the instructional program, and their primary purpose is to provide progessional training for students. These activities may or may not be self-sustaining; the degree of self-support depending upon institutional policy. The net cost or profit would be charged to the parent department and allocated to the courses based on population.

The faculty service report indicates how a faculty member's time is distributed among various activities. By converting these estimates of time spent with each activity into percentages and applying these percentages to the faculty member's salary fringe benefits, the faculty salary expense is determined for each activity.

The instructional salary expense is charged to the courses that the instructor taught during the year. The advising and counseling salary expense, departmental research salary expense, administration salary expense and committee work salary expense are combined and allocated to the courses taught by the department on the basis of the number of students registered for each course.

The sponsored research salary expense and public service salary expense are allocated on a direct basis to organized research and extension and public service, respectively. (See Flow Chart 13)

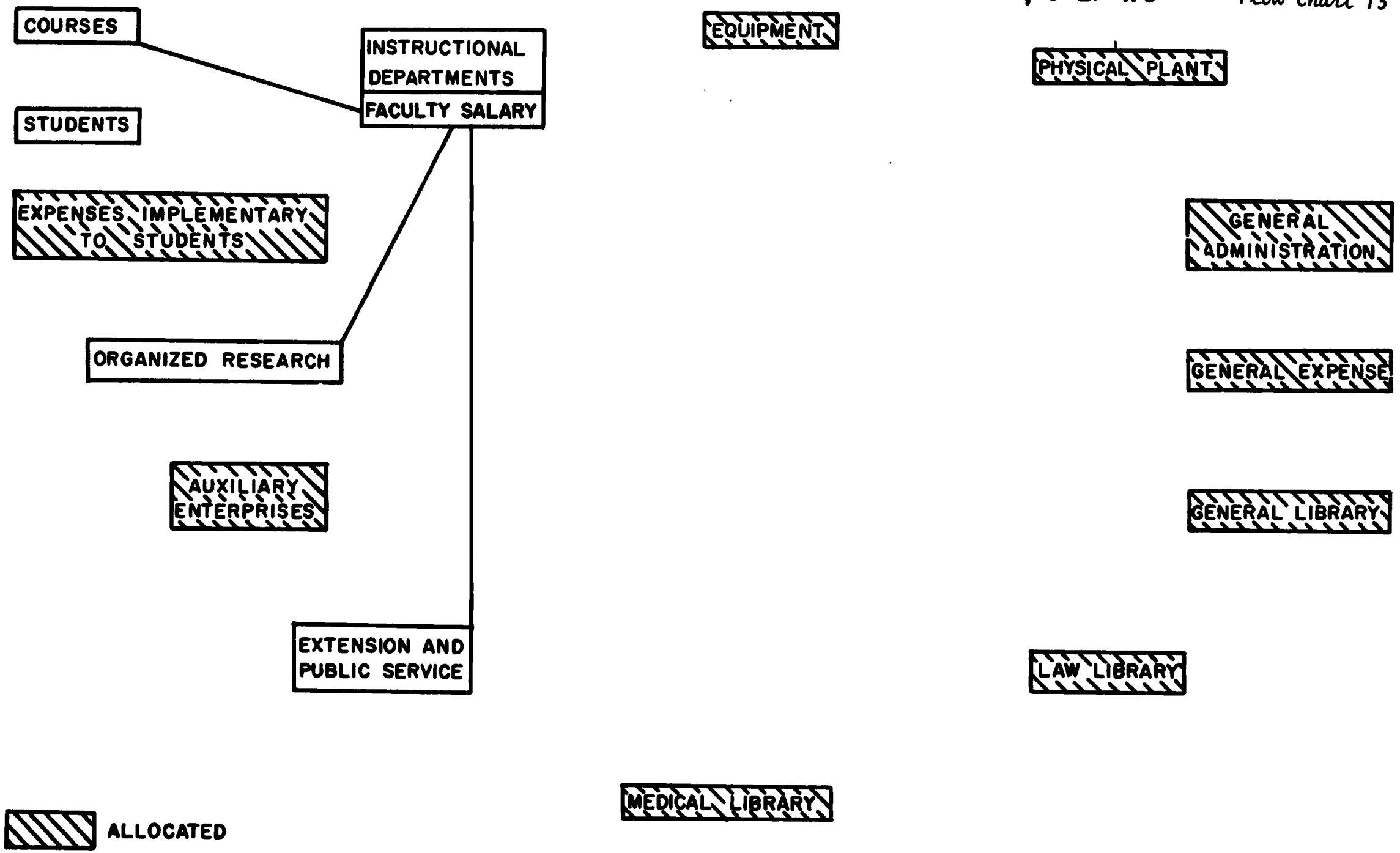
Computation of Salary Expense for Staff Assignments

Table 10

Data Source	Department	Assignment	Full-Time Equivalent Staff Employed	Full-Time Equivalent Staff Assigned	Earnings	Benefits	Salary Expense	Assignment Expense
Payroll	Math		1.000		6,000.00	1,000.00	7,000.00	
Teaching	Math	Math 21		.216				1,512.00
Teaching	Education	Education 160		.357				2,499.00
Teaching	Math	Math 151		.227				1,589.00
Non-Teaching	Math	Research		.150				1,050.00
Non-Teaching	Math	Committee		.050				350.00
				1.000				7,000.00

INSTRUCTION, ORGANIZED ACTIVITIES RELATING TO INSTRUCTION, STEP #9

Flow Chart 13



COST ALLOCATION SYSTEM

Summary

The end result of the Cost Allocation process should provide the administration with information in the following areas:

1) Student Costs – faculty, library, academic administration, general expenses, student expenses, general administration, capital and maintenance per student; this information providing a basis for forecasting costs in relation to population variances.

2) Faculty – the ratios between students and faculty can be analyzed in detail by program. This should provide some of the answers on program implementation, discontinuance or consolidation and funding.

3) Curriculum – the cost of offering any and all courses should be readily available, thus contributing to management the basic information relative to making decisions in this area. These costs will be available by function and object of expenditure.

4) Space – administrator's should have the total cost of operating additional space and how it affects student costs. The results will also measure the effectiveness of utilization in terms of dollars invested.

5) Finance-Budgeting – accurate historical data plus a sound future plan generally result in good fiscal management. The uniform cost accounting system will provide very accurate and detail historical financial information to be applied with future forecasts and programs into a sound budgeting process.

6) Efficiency – the above managerial information should enable administrators to more effectively analyze their operations and direct action based on total financial facts with the inherent result of efficiency.

The effectiveness of the total information systems depends largely on the utilization of its results on a cooperative basis for the general good of higher education and the public of South Dakota.

Four cost centers result from the nine step allocation process (Flow Chart 14) namely, courses, students, organized research, and extension and public services. These centers retain their identity because of their individual uniqueness to the educational process.

COST CENTERS RESULTING FROM ALLOCATIONS

Flow Chart 14

COURSES

STUDENTS

EXPENSES, IMPLEMENTARY TO STUDENTS

ORGANIZED RESEARCH

AUXILIARY ENTERPRISES

EXTENSION AND PUBLIC SERVICE

INSTRUCTIONAL DEPARTMENTS

EQUIPMENT

PHYSICAL PLANT

GENERAL ADMINISTRATION

GENERAL EXPENSE

GENERAL LIBRARY

LAW LIBRARY

MEDICAL LIBRARY

ALLOCATED

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Appendix D: Budget Preparation and Processing

BUDGET PREPARATION AND PROCESSES

Budgets are statements of estimated income and expenditures for fixed periods developed from a plan into a program. They express in terms of dollars the educational and research program of the institution. Their approval and/or appropriation by proper authorities constitutes authorization to incur the expenditures set forth and to collect the anticipated income. One of the purposes of budgets is to ensure that an institution does not obligate itself in excess of available revenues and other financial resources. The approved budgets of an educational institution are the primary instruments of fiscal control; therefore, every institution should prepare and adopt budgets covering ***all*** its receipts and expenditures and should establish suitable methods for the control of expenditures in accordance with the approved budgets.

The form of the budget should correspond with the accounting system and with the organization of the institution. The extent to which accounts are detailed in the budget depends upon institutional policy.Insofar as practicable, the account classifications used in the budgets should correspond with those used in the annual and internal reports as well as in the accounting records. The budget accounts within any budgetary unit may be condensed into programs and major object classifications such as personal services, supplies and expense, and equipment. Separate budget accounts may be maintained for any classification over which special control is desired, such as travel or printing and publications.

In most educational institutions the department is the budgetary unit. It is important that responsibility be placed in a single individual for conducting the affairs of the budgetary unit within the limitations of the budget. Logically, that individual is the department head. One person may be responsible for more than one budget, but no one budget should be administered by more than one person.

The current general funds budget should be prepared and adopted annually well in advance of the beginning of the fiscal year. This budget should cover all anticipated expenditures and appropriations from current general funds, including those for educational and general functions, auxiliary enterprises, and student aid.

Current restricted funds may be included in the annual operating budget, or they may be budgeted separately as received. These funds frequently are budgeted on a project, rather than a fiscal year, basis. In either method, the budget of the current restricted funds must be controlled in a manner which will ensure the observance of the restrictions which apply.

Anticipated expenditures for plant expansion and improvements should be budgeted. These budgets usually are prepared and adopted on a project basis which may not coincide with the fiscal year.

Since the annual budget is the expression in monetary terms of the educational program of the institution, educational planning should precede the actual preparation of the budget. Such planning is one of the primary responsibilities of the president. One of the characteristics of successful management is the ability to formulate plans which result in a budget that provides a well-balanced distribution of support for all areas of service and activities of the institution. The president probably will find it necessary to confer frequently and freely with other administrative officers, including the chief business officer, in the development of plans for the future. The president usually will present his plans in broad outline to the governing board for approval before work is begun on drafting the formal budget.

The governing board–representing the public, friends, benefactors, and alumni of the institution–must assume ultimate responsibility for the budget. In publicly controlled institutions, final operative authority over all phases of institutional operation usually is vested in the governing board. The governing boards of all institutions generally are composed of individuals whose primary occupations are outside the area of education and who can devote but a part of their time to the affairs of the institution. Consequently, the governing board can best serve the institution by directing its attention to major policies. The board can effectively discharge its budgetary obligations and responsibilities by approving general policies which affect the educational and financial programs of the institution.

Good budgetary procedure includes control. Without control a budget is worthless, regardless of how accurately or how carefully it has been prepared. One of the main purposes of budgetary control is to ensure that expenditures will not exceed appropriations. This is one of the primary responsibilities of the business officer.

It should be remembered that the adoption of a budget does not guarantee realization of the estimated income. The business officer must maintain records which will show actual receipts in comparison with budget estimates, and he should report promptly to the president any major difference. If it is apparent that the estimated income will not be realized, steps should be taken either to provide the necessary revenue from other sources or to reduce budget appropriations. If the budget includes a contingent account, the necessary adjustment may be made by reducing this appropriation.

The department head has the first and primary responsibility of control of expenditures for his unit. He must see to it that the salaries involved in appointments of staff do not exceed the budget appropriations. Therefore, he must restrict expenditures for supplies and equipment to the amounts appropriated for these purposes. He must plan the expenditures for his department so that the appropriations will last through the entire fiscal year. Unless department heads take these responsibilities seriously, the institution may be in difficulty even though adequate controls are maintained in the central business office. Once the budget has been approved, the educational and financial pattern has been set and no department head should deviate therefrom without the approval of higher authority. [2]

[2] College and University Business Administration, Volume I (ACE–1952)

BUDGETING PROCESSES

Most educational institutions are experiencing increased enrollments, new and expanded programs, inflation, and other factors have caused heavy burdens at the same time. There have been comparable increases in the budgetary requests for the other agencies of state governments. The requests for state funds have almost always far exceeded available revenue and state government officials have been constantly faced with the necessity of trimming budgets when it has not often been clearly evident where the trimming would cause the least harm. The private institutions are experiencing the same financial squeeze, causing higher student contributions, requiring longer and more active development policies, and more sophisticated accounting and budgetary systems.

In many cases, the positions of governors and legislators have been made all the more untenable due to a lack of tools to aid them in mastering the complexities of such large appropriations as they have been faced with making. The evaluation of the peculiar needs of many state agencies constitutes an almost insurmountable task when standards and measurements are unavailable for properly evaluating and assessing those needs.

The budgets of higher education institutions have been particularly difficult for state government officials to understand and evaluate. The operations of colleges and universities are not comparable to those of the functions of highway construction agencies, welfare agencies, or even public schools and are a great deal more difficult to reduce to measurable units. Perhaps the most outstanding characteristic of higher education is its great diversity–a characteristic which most people in higher education would defend as being its great virtue. This great diversity lends itself to the creation of many complicating factors with the result that few people are able to develop a comprehensive understanding of higher education functions and financial needs without considerable exposure and adequate reporting techniques.

To aid with the problems of appropriating and allocating funds fairly to colleges, many states have set up budget review staffs and fiscal officers within the governing boards. As a result, decisions in regard to appropriating and allocating money to higher education have been greatly facilitated. Too, as a result of the work of this officer, many improvements have been brought about in recent years in the methods and techniques of

determining budgetary needs of colleges and universities. These developments are still in their infancy, however, and a great deal more research needs to be done in order to fully establish their validity. The fruits of this research should further advance this progress.

Budget analysts have normally approached the evaluation of higher education budgets by attempting to determine the productivity and efficiency of institutions of higher learning. Such information has been considered basic to the assessment of their needs. Only after productivity and efficiency is determined, whether in relation to quantity or quality, can valid judgments be made concerning what it should cost for that production. However, as has been pointed up before, the determination of true productivity and efficiency of higher education institutions—what it is or what it should be—is an extremely difficult undertaking, and it is usually necessary for budget analysts to resort to the use of quantifications of students, buildings, equipment, price changes, administrative policies, and other measurable items in evaluating the needs of institutions.

With the use of the basic ingredient of productivity, rather elaborate "formulas" have in some cases been developed by budget planners in their search for objective standards for appraising budget requests. There are many different formulas in use that provide almost unlimited fiscal information.

Webster, in part, defines formula "as an expression of the composition of a combination of symbols and figures to show the constituents their exact proportions". The use of formulas from this definition as finding exact guidelines and equations that produce complete accuracy is impossible. However, the term is commonly used in higher education circles and is used in this report.

It is generally agreed by whose who use budget formulas, yardsticks, or standards that they should not serve as a replacement for the judgments of experienced administrators. Instead, they should be used as a supplement to making professional judgments more than mere guesswork. They should be reviewed and revised on an annual basis and always in step with the current trends of higher education and research.

In order for budget formulas to be used skillfully and preceptibly, it is necessary that there be an awareness of several possible basic limitations to their use. If these limitations are recognized, budget planners should be able to build more effective budget formulas as well as avoid placing undue reliance upon the outcomes of their application. The limitations that are discussed are not necessarily inherent in all budget formulas and can possibly be avoided altogether in the development of specific formulas.

1) Tendency to Perpetuate "Normals":

There is a tendency for formulas to perpetuate norms, averages, past ratios, and experiences. Almost all, if not all, formulas are based to a degree upon what was done in the past, what is considered to be normal, or what is done in other states. There is much to be learned from such considerations, but there is real danger in affixing to them the seal of perpetual life. It is helpful to know, for example, what was spent per student last year but there might be little reason to believe that that is what should have been spent. A sound interpretation concerning the adequacy of an expenditure must involve at some point the rendering of an opinion or a judgment and cannot be made solely on the basis of financial analysis but must include productivity and efficiency.

2) Non-Recognition of Special Functions:

Quite often institutions of higher learning have special functions to perform and the carrying out of those functions might involve the expenditure of a greater or lesser amount of money than what is considered reasonable in other institutions. Therefore, such an institution might not conform to any predetermined set of standards because of its uniqueness. An attempt to evaluate the needs of that institution on the basis of norms from other institutions might very well impair its effectiveness unless the application of those norms is accompanied by keen insight.

3) Not Conducive to Ease of Understanding:

It is relatively easy to develop a budget formula so that the mechanics of the formula can be easily understood. However, it may be quite difficult for those who are not well versed on the subject to understand why particular composites of formulas are used. It is always desirable and of public importance that higher education institutions involve tools of measurement that can be generally understood. Budget formulas will probably continue to possess a degree of incomprehensibility

insofar as the general public is concerned, not because of design but because of complexity of higher education institutions and a lack of communicative techniques.

Regardless of the field, the reasons for particular professional judgments are quite often difficult to isolate and more difficult to communicate to the layman. The field of higher education must relate its financial plan into professionally organized programs, based on experience, needs and trends of our day. These judgments probably result, at least in part, from a keen perception made possible by experience and probably possess more validity than any judgments based on objective data alone.

4) Tendency to be Insensitive to New Needs:

Quite often in higher education the need develops for the offering of new courses and new programs in order to recognize new or expanded bodies of knowledge. These new offerings might very well require a large outlay of cash initially and periodically during the early years. For example, in the past few years a number of colleges and universities across the country have instituted various kinds of programs relating to computer sciences which have usually proved to be quite expensive. However, they have generally been deemed important enough so that the expense in the early years of such programs is warranted. A budget formula that is based exclusively on past experience and averages tends to be insensitive to new developments and new needs. By the same token, consideration has to be given to programs that become obsolete. There is a tendency to continue the financial support for these areas through the "Base Year Approach" and formula standards.

Budget Building Processes:

There is an almost infinite number of differences in procedures among the various states for the determination of budget needs of colleges and universities. A study of such procedures reveals that there are only a relatively few basic approaches currently in use. These approaches differ primarily in the degree to which subjectivity is injected into the budget building mechanism. One approach is the utilization of completely subjective judgments concerning the financial needs of institutions. Other approaches utilize objective techniques such as formulas, yardsticks, or standards in the determination of those needs.

Approaches utilizing objective techniques might be classified as (1) those that involve determinations of increases or decreases of expenditures for individual budget items from actual levels in a base year (the "base year" approach), (2) those that involve the calculation of a budget base upon which all the functions of the budget are figured (the "budget base" approach), and (3) those that involve individual formulas for each of the functions of the budget (the "functional" approach).

The "Base Year" Approach:

Representative of the first of the approaches involving the use of objective criteria is that used in Iowa. In that state, use is made of a starting base which usually consists of the preceding year's budget. From this starting base additions or subtractions are made in accordance with estimates of increases or decreases of need in specific areas of operation. For example, the 1961-63 budget for one institution included an 11.4 per cent increase in academic salaries which was considered necessary in order to bring average salaries to third place among comparable institutions in an 11-state area. Specified percentage increases for various types of non-academic salaries were deemed necessary based on surveys of going rates of pay for clerical, maintenance, and labor staffs in the local community. Percentage increases were also deemed necessary for general expense, equipment, and books. Further, the budget specified additional amounts of money that were needed for strengthening and expanding particular programs and for meeting special needs such as costs involved in converting to a direct dial telephone system and additional costs arising from an increase in federal social security taxes.

The "Budget Base" Approach:

Another approach involving the use of a base is that employed by Oklahoma and Tennessee. In both these states, the budget base consists of estimated needs for the function of instruction. These needs are determined by using a particular student-faculty ratio to arrive at the number of faculty members that are needed and then multiplying the result by the average salary that is desired. After total faculty salaries are calculated in this manner, a specified percentage is added for other instructional expenses to arrive at total needs

for the function of instruction which then becomes the budget base. In Tennessee, budgetary needs for just the functions of administration and general expense, libraries, and operation and maintenance of the physical plant are calculated by taking certain percentages of the budget base. In Oklahoma, needs for all the functions of the budget except instruction are figured by multiplying the budget base by certain specified rates.

The "Functional" Approach:

The complex formula used by Texas in developing budgets for higher education institutions is exemplary of another basic approach. Independent formulas have been developed in Texas for use in estimating financial needs for each of several functions of the budget. Needs for various functions of the 1964-65 budget were determined as follows:

1. General Administration – A rate of $2.30 was multiplied by the first 120,000 semester credit hours and a rate of $1.80 was multiplied by all semester hours over 120,000. A minimum amount of $130,000 was granted for this function.
2. General Institutional Expense – Requests of individual institutions were accepted for several areas and fixed amounts were set forth for other areas which varied from one institution to another.
3. Teaching salaries – Semester credit hours of production in various subject matter fields were multiplied by specified rates for the various fields. The rates also varied according to three levels–undergraduate, masters, and doctoral.
4. Departmental Operating Expense – Needs for this area were determined in the same manner as were teaching salaries except different rates were used.
5. Instructional Administration – Semester credit hours were multiplied by a specified rate. The rate varied from one institution to another.
6. Organized Activities–Budget recommendations for agricultural activities were the same as institutional requests. Recommendations of all other activities were the same as estimated income from those activities.
7. Library – Several different methods were used for calculating the needs for libraries. Salary needs were calculated by determining the number of staff and multiplying by the desired salary, the number of staff being determined upon the basis of a desired ratio of staff to FTE students. The ratio was graduated on the basis of enrollments. Needs for books were determined by taking a certain percentage of the minimum base for the size of the library times $7 per volume. The minimum base was specified for the various institutions. Other operating costs were calculated by taking 6 per cent of total needs for salaries and books.
8. Organized Research – Teaching salaries were used as a base for determining recommendations for organized research. A certain rate was applied to teaching salaries to get the total amount recommended for organized research. The rate varied among institutions and amount fields within institutions.
9. Extension and Public Service – Recommendations for this function were based upon institutional estimates of income to be derived from extension and public service activities.
10. Physical Plant Administration, Planning, and General Services – With but one exception recommendations for this function were determined by taking the amount that was appropriated for 1963 and adding 12 per cent.
11. Building Maintenance – Needs for building maintenance were determined by multiplying maintenance cost factors by building replacement costs. The maintenance cost factors varied according to whether the building was an air conditioned or non-air conditioned wood frame, masonry wood, or masonry concrete building.
12. Custodial Service – Budget recommendations for this function were arrived at by multiplying total square feet of building space by 19 cents per square foot.
13. Grounds Maintenance – With but one

exception, recommendations for this function were determined by taking the amount that was appropriated for 1963 and adding 12 per cent.

14. Utilities – Recommendations for this area were the same as requests for the institutions.

Each of the basic approaches to budget building has certain advantages and disadvantages and no one of them would be particularly suited to the needs of all states. Every state has in many respects an economic, political, and social environment that is unique and this environment must be taken into consideration when decisions are made concerning budget building procedures. A completely subjective approach, for example, might work quite well in a state with only two or three state institutions of higher learning but probably would not work well in a state with a great many state colleges and universities. It would be a very onerous undertaking to attempt to apply completely subjective judgments in determining the needs of so many institutions as in the state of South Dakota. No one individual or group of individuals could be expected to make such judgments so that both equity and need would be served. The results would almost assuredly be a distribution of available money on the basis of political power rather than on the basis of consideration of state-wide needs for higher education.

The "base year" approach has certain advantages in that individual functions and programs of institutions can be readily recognized and needs can be determined on the basis of factors other than past ratios and norms. However, most of the calculations that are made when this approach is employed must of necessity be made by the institutions themselves, and, therefore, coordination of higher education institutions would be difficult to achieve in a state with many institutions. In Iowa, however, there are only three state institutions of higher learning and this approach can be used quite readily. Also, the approach can be more appropriately used in states where higher education is adequately financed than in states where higher education is poorly financed.

An advantage of the "budget base" approach is that it requires a great deal less work to develop and apply than do other approaches that are based on objective data. After the needs for the function of instruction are determined, needs for other functions of the budget can be ascertained easily by applying different percentage figures to the budget base. It makes the assumption, of course, (based upon historical data) that each of the functions of the budget is and should be related in some measurable manner to the function of instruction. Those that favor this approach defend it on the ground instruction is the basic purpose of the college or university and that all other functions should be subordinate to it. They would say that the administrative, library, and physical plant operation functions are service functions and that expenditures for such functions should be directly related to expenditures for the instructional program.

A very real difficulty involved in the use of the "budget base" approach is in ascertaining the relationships that should exist between each of the functions of the budget and the budget base. These relationships should not necessarily be the same for all sizes of institutions, for all types of institutions, and under all economic conditions. A recognition of the fact that varying conditions will alter such relationships should be made and constant evaluation should be engaged in to insure that relationships recognized in the budget mechanism are valid. Arbitrary percentage relationships should not be used merely to lend the approach an image of objectivity.

The "functional" approach is probably more accurate than other approaches in arriving at the financial needs for individual functions of the budget since it utilizes specific information about the job to be done by the various functions. If the size of the budget request for building maintenance, for example, is related to the amount of floor space and the type of buildings to be maintained, a more accurate determination of the money is needed to maintain the buildings can be made. However, this approach makes the assumption that the amount of floor space available is consistent with the floor space needs of the institutions as demonstrated by the number of students to be served and the kinds of programs to be offered. If more floor space is available in an institution than is needed, the institution might receive an inequitable share of money for building maintenance.

Another disadvantage of the "functional" approach is its complexity. Different criteria must be developed and applied for each of the functions of the budget and they must be continually re-evaluated in order that their validity might be maintained. All of these operations must of necessity involve a great deal of work and staff time. In fact, the amount of work involved might very well prohibit the use of this approach in many states. [3]

Summary

The cost allocation system, as proposed in this report, makes the "functional approach" a very adaptable budgeting process to South Dakota. The resources of our state are limited and under these circumstances, it behooves us to use all possible managerial and financial interpretations in arriving at maximum utilization and efficiency. The basic program of instruction would be budgeted by using historical cost information applied to student population by subject matter and professional standards for corresponding faculty and space. The other programs would be stated financially as a percentage of instruction. More consideration should be given to the students contribution both for tuition and fees and auxiliary enterprises contributions to the entire system. With this file of fiscal knowledge, the administration, governing boards and legislature would be in a better position to understand and act with confidence.

Major sources of information were:

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[2] College and University Business Administration, Volume I (ACE–1952)

[3] Self Study of Higher Education in Oklahoma - Report 4, March, 1963.

Appendix E: Projected Operating Costs for Higher Education

Once a sound system has been adopted for the accumulation of meaningful data, the process of cost projection, can be systemized and computerized quite readily on data processing equipment. Enrollment, educational subject matter, faculty and staff and space can all be integrated into a comprehensive system that provides accurate administrative guidelines. The flexibility of the system should enable the administration to pursue several alternatives in detail analysis before arriving at the most feasible and acceptable solution.

Previous Forecasts:

Educational forecasts in the past have been based on very general statistics, especially when related to finance. The variances of student enrollments, for example, should be reflected by particular subject matter. It is quite obvious that an agricultural student education costs are materially less than a student in nursing. To say that a ten percent increase in enrollment will create a corresponding increase in costs is misleading. This enrollment increase must be analyzed by educational program cost to determine its effect on finances.

Future Projections:

The acceptability of the cost allocation system would greatly enhance the accuracy of higher educations' statistical projections. Whenever a new system or process is employed the comparativeness of historical facts are distorted. This particular system calls for facts and figures never before available on a consistent and comparable basis; therefore, it would be a matter of time before historical base amounts could be utilized as the basis of future projections. Once this information is available, however, the institutions fiscal officers and budget analysts will be able to project relatively accurately for five and ten years and a general look at twenty years into the future.

Appendix F: Costs Evaluative Instrument

SOUTH DAKOTA COMMISSION ON HIGHER EDUCATION FACILITIES
OFFICE OF EXECUTIVE SECRETARY
STATE CAPITOL BUILDING
PIERRE, SOUTH DAKOTA 57501

STATEWIDE COMPREHENSIVE PLAN OF HIGHER EDUCATION IN SOUTH DAKOTA

COSTS EVALUATIVE INSTRUMENT

EXPLANATIONS AND INSTRUCTIONS

COMPLETION INFORMATION

A. RESPONDENT: This form is to be completed by the appropriate institution fiscal officer. If you need additional clarification on any of the items, please contact your Institution Project Coordinator or call Harland Flemmer, Chairman, 256-3551, Ext. 211, General Beadle State College, Madison, 57042.

B. NAME OF INSTITUTION: _____

C. NAME AND TITLE OF RESPONDENT: _____
NAME

_____
TITLE

D. DATE EVALUATIVE INSTRUMENT COMPLETED: _____

GENERAL INSTRUCTIONS

A. TIME PERIODS COVERED:
   1. Educational and General Income and Expenditures should be given for the fiscal year that ended nearest June 30, 1968.

   2. Tuition, Fees, Room, Board, and Other Charges should show rates in effect during the 1967-68 academic year.

B. PURPOSE AND SPECIFIC COMMENTS ON SECTIONS OF EVALUATIVE INSTRUMENT:
   1. Educational and General Income and Expenditures. The purpose of this section is to obtain information in regard to educational and general income and expenditures of private and public colleges and universities in the state of South Dakota. Income date is being requested 'by source' and expenditure data is requested 'by function'. If it is possible to do so, please exclude medical schools, dental schools, schools of veterinary medicine, agricultural experiment stations, agricultural extension services, geological surveys, and associated technical schools. If any of these schools or services are included, please so indicate._____

2. Tuition, Fees, Room, Board, and Other Charges. The purpose of this section is to obtain information in regard to tuition, fees, and other charges made of students by colleges and universities in South Dakota. This section should be completed on the basis of the amount that a full-time student (one enrolling in 32 semester hours for two semesters) would pay for each of the listed items. If your institution makes a single charge for tuition, fees, and other items, apportion that charge among the items listed and indicate by an asterisk (*) those that are covered by the single charge.

C. SCOPE OF EVALUATIVE INSTRUMENT: The primary objectives of the Costs Research Committee are to design various information systems that will provide financial and operating information to all levels of administration in such a manner that it is comparable, comprehensive, unbiased and in accordance with generally accepted accounting principles as prescribed by the American Council on Education for Institutions of Higher Education. The financial accounting system will be designed based on cost accounting principles and standards with resultant detail information for Planning, Programming, and Budgeting.

A cost allocation would make the "functional approach" a very adaptable budgeting process to South Dakota. The resources of our state are limited and under these circumstances, it behooves us to use all possible managerial and financial intrepretations in arriving at maximum utilization and efficiency. The basic program of instruction would be budgeted by using historical cost information applied to student population by subject matter and professional standards for corresponding faculty and space. The other programs would be stated financially as a percentage of instruction. More consideration should be given to the students' contribution, both for tuition and fees and auxiliary enterprise contributions to the entire system. With this file of fiscal knowledge, the administration, governing boards and legislature would be in a position to understand and act with confidence.

If a sound system is developed for the accumulation of meaningful data, the process of cost projection, can be systemized and computed on Electronic Data Processing equipment quite readily. Enrollment, educational subject matter, faculty and staff and space can all be integrated into a comprehensive system that will provide accurate administrative guidelines. The flexibility of the system will enable the administration to pursue several alternatives in detail analysis before arriving at the most feasible and acceptable solution.

Educational forecasts in the past have been based on very general statistics, especially when related to finance. The variances of student enrollments, for example, should be reflected by particular subject matter. It is quite obvious that an agricultural student's education costs are materially less than a student in nursing. To say that a ten percent increase in enrollment will create a corresponding

increase in costs is misleading. This enrollment increase must be analyzed by educational program cost to determine its effect on finances.

The acceptability of a cost allocation system would greatly enhance the accuracy of higher educations' statistical projections. Whenever a new system or process is employed, the comparativeness of historical facts are distorted. This particular system calls for facts and figures never before available on a consistent and comparable basis; therefore, it will be a matter of time before such historical base amounts can be utilized as the basis of future projections. Once this information is available, the institutions' fiscal officers and budget analysts will be able to project relatively accurately for five and ten years and a general look at twenty years into the future.

This evaluative instrument will provide these future forecasts on the existing information collection system. It should prove very interesting to compare this survey with that of the cost allocation system projection which should be available after the fiscal year 1970.

D. NEED FOR ESTIMATES: There should not be a need for estimates as exact data should be available for each requested item. DO NOT LEAVE ANY ITEM BLANK.

DEFINITIONS: Source: (Federal Support to Universities and Colleges, Fiscal Years 1963-66, National Science Foundation; American Council on Education)

Research is defined as scientific inquiry. It includes basic studies - those oriented toward deeper or more meaningful understanding and knowledge per se in a particular subject or field, and applied studies - those aimed at new or more complete knowledge in the light of potential practical application.

Development is the systematic use of scientific knowledge directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes. It excludes quality control, routine product testing, and production.

R. & D. plant includes all direct, indirect, incidental, or related costs resulting from or necessary to the construction of, acquisition of, major repairs to, or alterations in structures, works, fixed equipment, facilities, or land for use in scientific research and development at a university or college, or at a Federal Contract Research Center. Fixed equipment includes accelerators, reactors, wind tunnels, radio telescopes, etc.

Other academic-science activities represent obligations for all other activities that are science-related but not included elsewhere. Included are obligations to a university or college that represents direct funding (excluding repayable loans) of science-related activities for purposes

such as scholarships, fellowships, traineeships, institutes, course-content improvement projects and other science education pursuits; facilities and equipment to be used primarily for education activities; collection, storage, handling, and dissemination of scientific and technical information; and institutional grants for general or specific purposes. (Includes Social Sciences, Life Sciences, Physical Sciences.)

Nonscience activities include all support of fields of endeavor at universities and colleges other than those specified as academic science. (Includes Arts and Humanities.)

Department instruction and research includes all direct expenditures of the departmental instruction program. Summer session instructional expenditures would be included, as would expenditures for clinics which are operated as an integral part of the instructional program.

Off-campus instruction would include all direct expenditures for branch instruction. Off-campus programs may be defined as those in which credit courses are offered at a center located away from the main campus. In addition, the category should include any expenditures incurred for in or out-of-state instructional programs operated for the Armed Forces where credit toward a degree may be earned, extension classes, correspondence courses, and special off-campus instructional activities where credit is offered.

Organized activities relating to education departments would include all expenditures for teaching aids, such as audio-visual service, computer laboratory, or research on the instructional program itself.

The research category would comprise all direct expenditures for separately budgeted research. This would be university-funded research, federally funded research, and research sponsored by commercial firms and private foundations.

The extension and public service category would be all expenditures for public service projects which are not part of the institution's continuing instructional program. This would include Educational Television, radio, workshops, clinic, etc.

Library would include all expenditures for the main institutional library and any departmental libraries which are supervised by the institution's chief librarian.

Physical plant would include all expenditures incurred in operating and maintaining the physical facilities, both building and grounds, of the institution.

The auxiliary enterprises category includes all direct operating expenditures for such purposes as residence and dining hall, student union, bookstore, athletic facilities, student health services, etc. It would also

include payment for interest on indebtedness. The system will allow for separate and composite analysis of state owned and self-liquidating enterprises.

COSTS RESEARCH COMMITTEE:

A. The following members of the Costs Research Committee wish to express their appreciation for your assistance in completing this important form of the Statewide Comprehensive Plan.

B. Costs Research Committee

1. Harland Flemmer, Chairman, Business Manager, General Beadle State College
2. Dr. Howard Raid, President, Freeman Junior College
3. Gordon Rollins, Business Manager, Dakota Wesleyan University
4. Charles Shike, Comptroller, University of South Dakota
5. Norman Koehn, Controller, South Dakota State University
6. Dr. J. Lee Westrate, Senior Management Analyst, Bureau of the Budget

EDUCATIONAL AND GENERAL INCOME AND EXPENDITURES

Please indicate the number of student credit hours carried by all on-campus students during 1967-68 (including summer session) (Note 1) __ .

A. EDUCATIONAL AND GENERAL INCOME (Note 2)

1. Student Fees --- All tuition, general and specific fees assessed against students for educational and general purposes, net of refunds. Do not include such charges as those for room, board, and services rendered by auxiliary enterprises. $_____

2. Governmental Appropriations --- All amounts received from or made available by governmental sources out of governmental -- not institutional -- revenues, which are expendable for educational and general purposes. Income from governmental agencies for contract and grant research should be excluded. (This income would be included under gifts and grants.)

   (Includes $_____ remitted to State General Fund)
   From State Government---$_____
   From Federal Government---$_____
   From Local Government---$_____

3. Endowment Income --- Income earned on the investment of endowment and other non-expendable funds available for educational and general purposes. If endowment funds include real estate, only the net income from such property should be reported. $_____

4. Gifts and Grants --- All unrestricted gifts expendable for educational and general purposes and all restricted gifts expended during the period of this report for educational and general purposes. $_____

Note 1: Use 16 semester hours as semester FTE; use 1967 summer session and 8 hours as FTE.

Note 2: The state supported schools should record their income in the respective categories as memorandum figures and not added in the total.

5. Sales and Services of Educational Departments --- Incidental income of educational departments such as proceeds from sale of departmental publications, etc. $_____

6. Organized Activities Relating to Educational Departments --- Gross income of organized activities operated in connection with instructional departments and conducted primarily for the purpose of giving professional training to students. Examples are laboratory schools and home economics cafeterias. $_____

7. Other Sources of Income --- Income from current fund investments net rentals received from outside agencies or persons for the use of auditoriums, tennis courts, equipment, etc., $_____

8. Auxiliary Enterprises --- Income from operations. $_____

9. Student Aid --- Grants, Loans, and Scholarships $_____

B. EDUCATIONAL AND GENERAL EXPENDITURES

1. General Administration and General Expense --- All expenditures of the general executive and administrative offices serving the institution as a whole such as those of the governing board, president and business officer. All expenditures which are of a general character not relating to any specific division of the institution. (Such expenditures will include those for guidance and counseling services, admissions and registration services, placement services, public relations and publications, and other general institutional expense.)$_____

2. Instruction and Departmental Research and Organized Activities Relating to Educational Departments --- Expenditures incurred for instructional programs for students pursuing regular course of study on campus which lead generally to a collegiate degree. All expenditures of organized activities operated in connection with instructional departments and conducted primarily for the purpose of giving professional training to students. Amounts reported under this heading should include expenditures for departmental research not separately budgeted or financed. $_____

3. Organized Research --- Expenditures of all separately organized research divisions as well as all expenditures for separately budgeted or financed research investigations. This includes expenditures for contract research. $_____

4. Extension and Public Service --- Expenditures of educational and other activities designed primarily to serve the general public. These activities include off-campus courses, correspondence courses, adult study courses, public lectures, institutes, workshops, demonstrations, package libraries, radio and television stations, statewide service agencies attached to the institution museums, and similar activities. $_____

5. Libraries --- All expenditures of the institution for separately organized libraries, both general and departmental. $_____

6. Operation and Maintenance of Physical Plant --- The aggregate expense of the physical plant of the entire institution, except those expenditures charged directly to auxiliary enterprise or to other functional classifications. Do not report expenditures for repairs and modernization projects financed by capital funds. $_____

7. Student Aid --- Grants, Loans, and Scholarships $_____

TUITION, FEES, ROOM, BOARD, AND OTHER CHARGES

A. Required Tuition and Fees --- Enter below amounts for tuition and fees charged all full-time students (except in the case of out-of-state tuition). If any of these fees are charged only once during the time a student is enrolled, indicate by a double asterisk (**).

1. Tuition - $_____
2. General Enrollment Fee - - - - - - - - - - - - - - - $_____
3. Out-of-state Tuition (amount in excess of general enrollment fee charged resident students) - - - - - $_____
4. Additional Registration Fee - - - - - - - - - - - - $_____
5. Student Union Fee - - - - - - - - - - - - - - - - - $_____

Other:

6. _____ - - - - - - - - - - - - $_____
7. _____ - - - - - - - - - - - - $_____
8. _____ - - - - - - - - - - - - $_____
9. _____ - - - - - - - - - - - - $_____
10. _____ - - - - - - - - - - - - $_____
11. _____ - - - - - - - - - - - - $_____

B. Special Charges --- Enter below charges made of students who choose to participate in the activity or partake of the service for which the charge is made. If any of the activities or services are covered by one of the fees or charges listed under "A" above, indicate by a triple asterisk (***).

Special Charges (Continued)

1. Athletic Tickets	$_____	6. Graduate Fee or Fees	$_____
2. Laundry	$_____		
3. Student Yearbook	$_____	7. Student Entertainment	$_____
4. Late Enrollment Fee or Fees	$_____	8. Student Activities	$_____
5. Change of Class Fee	$_____	9. Music Instruction	$_____
		10. Auto Mechanics Instruction	$_____

Other:

11. _____	$_____	21. _____	$_____
12. _____	$_____	22. _____	$_____
13. _____	$_____	23. _____	$_____
14. _____	$_____	24. _____	$_____
15. _____	$_____	25. _____	$_____
16. _____	$_____	26. _____	$_____
17. _____	$_____	27. _____	$_____
18. _____	$_____	28. _____	$_____
19. _____	$_____	29. _____	$_____
20. _____	$_____	30. _____	$_____

(If additional space is needed, please attach supplement information)

Please indicate your best estimate of the average amount a full-time student would pay for these special charges for two semesters $_____

C. Housing and Board Charges ---

1. Room (average charge for a single student sharing a double room in institutional facilities for two semesters $_____

2. Board (average charge for a student who contracts to eat in institutional dining halls for two semesters - if the contract is on the basis of less than a 21-meal week, equate to a 21-meal week) $_____

3. Apartment Rental (range of charges for two semesters for furnished apartments with utilities paid that are owned and operated by the instituion) $_____

D. Books and Supplies --- Please indicate your best estimate of the average cost of books and supplies for a full-time student for two semesters in your institution $_____

E. Remarks --- If the information supplied in this questionnaire is incomplete insofar as revealing the charges made of students in your institution, please make an adequate protrayal.